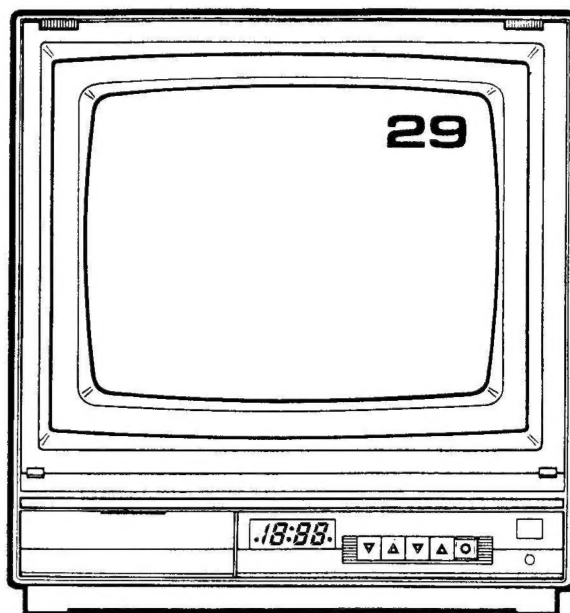


# HiNARi

# Service Manual



*Sunrise*  
TVA 1

## FEATURES

- 14" Portable Colour Television.
- Wake-up Alarm Function.
- Digital Clock & Time.
- Infra Red Remote Control.
- 30 Channels. On-screen Channel Display.
- Voltage Synthesizer Tuning. Tying.

Speaker  
Audio Output Power  
Operating Voltage  
Power Consumption  
Dimensions  
Net Weight  
Infrared Remote Control  
Features

Dia. 89 mm 16 ohm  
1.5W max  
AC 240V 50Hz  
70W  
380x385x400mm (WxHxD)  
13 kg

Standby, 0-9 and 10- and 20-key  
Keypad, Random Access  
Program Select, Program  
Down-Up, Volume Down-Up,  
Mute, Colour/Brightness Down-  
UP Off Timer, Display

## SPECIFICATIONS

TV Broadcasting	PAL-1
Receiving Channels	UHF 21-69
Number of Preset Program	30 (0-29)
Channel Indicator	On Screen Display
RF Aerial Input	75 ohm Unbalanced
Picture Tube	36 cm (14") 90 Degree In-Line Gun
Timer On Clock	Return to standby after 2 hours.
Timer On Screen	Return to standby after 30, 60, 90 mins.

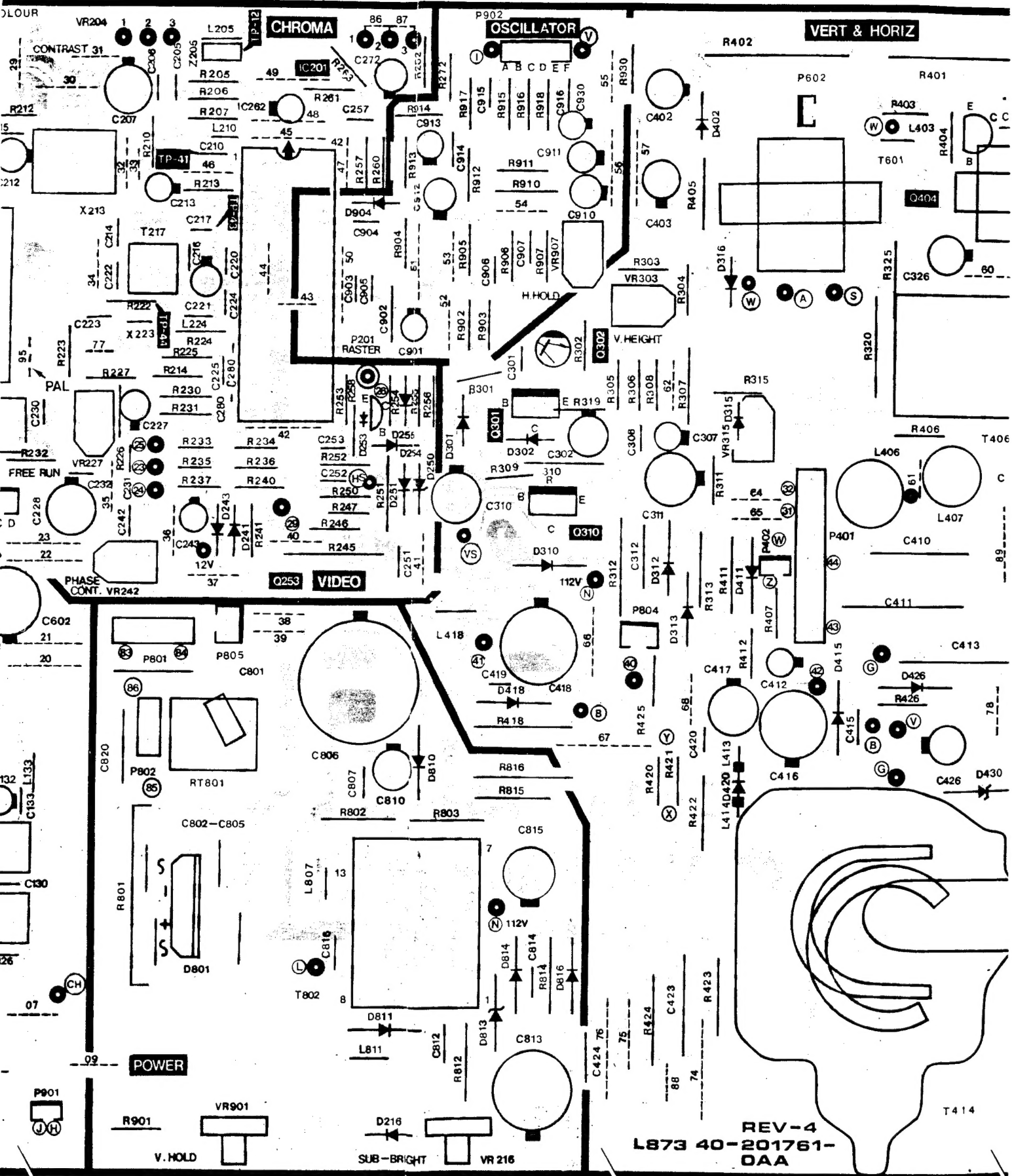
Effective Distance  
Power

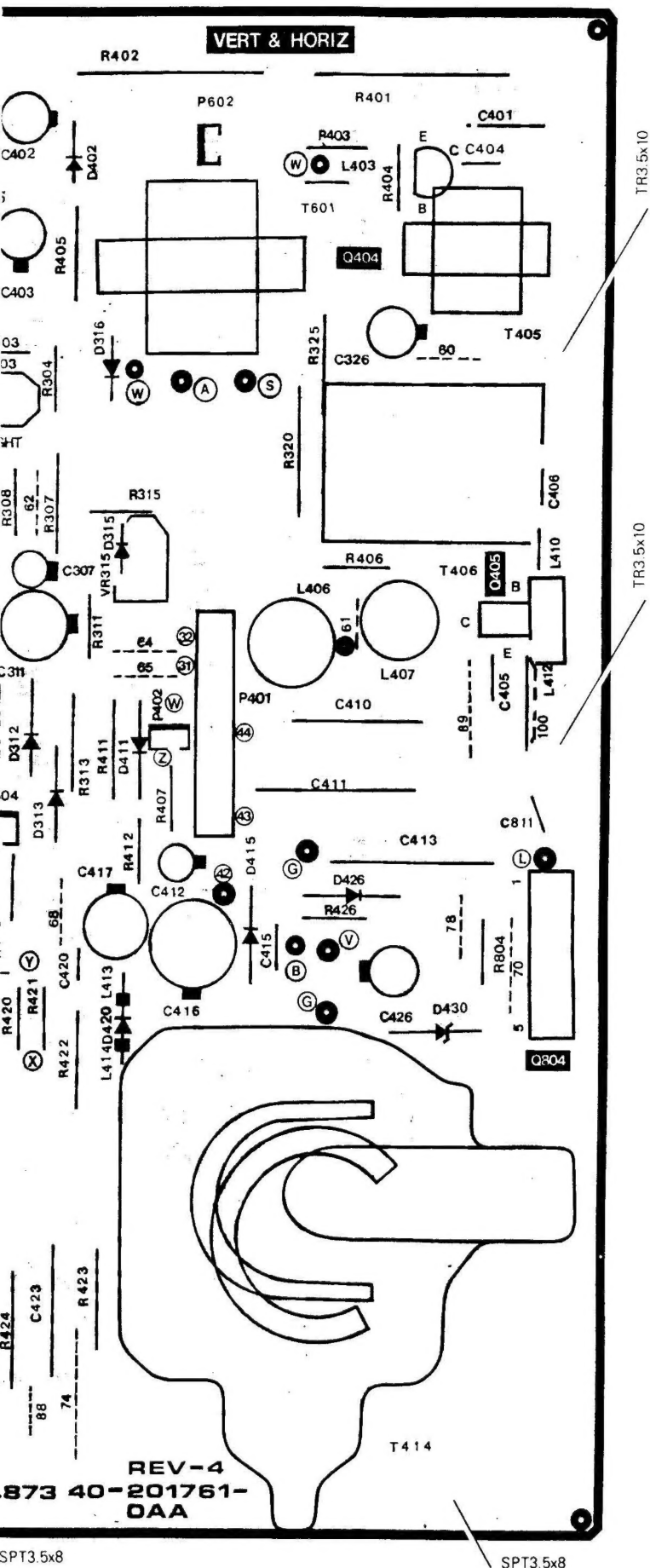
8 meters  
3V Batteries, 2 x type AAA or  
type UM4, 1.5V Alkaline  
batteries, NOT included  
170x59x15mm (LxWxH)  
80g

Dimensions  
Net Weight

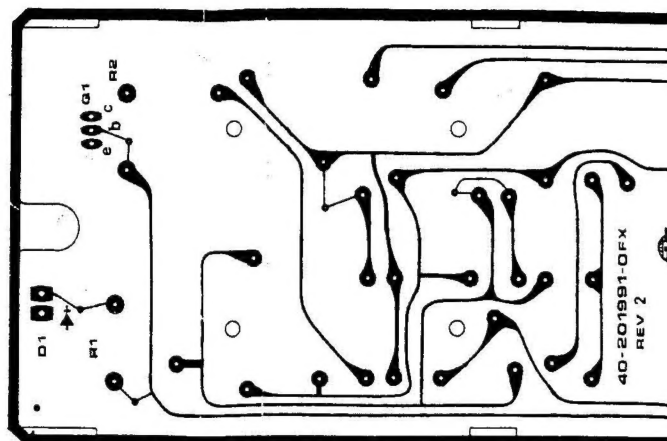
\* Design and specifications subject to change without prior notice.

SPT3.5x8

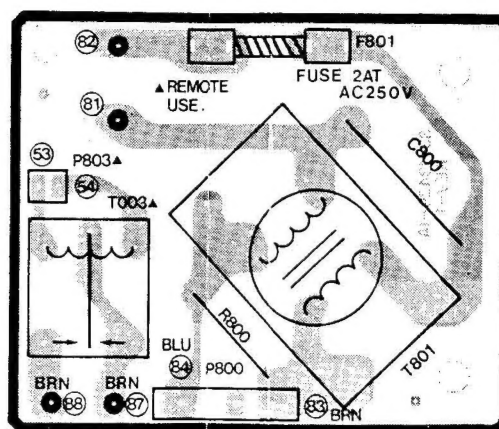




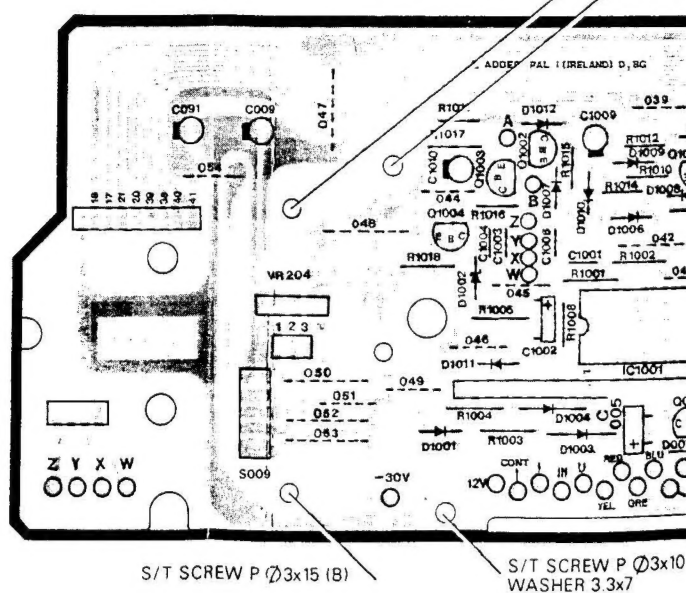
40-201991-OFX IR TRANSMITTER



33-134291-AAA POWER BOARD



40-201751-OAA SELECTOR BOARD







# CHASSIS PARTS LIST

**WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X - RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE".**

**NOTICE: The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.**

Location No.	Part No.	Description	Quantity
	08-20179-0003	08-20179-0-003 ASSEMBLY - MAIN BD. + CRT BD.	1.00
Z205	27-13717-1	45-137170-600 CERAMIC TRAP TFS 6.0 MHZ	1.00
Z103	27-10878-1	45-108780-400 CERAMIC FILTER 6MHZ	1.00
Z101	27-11261-1	45-112610-300 SAW FILTER F1035	1.00
X223	27-10719-2	45-107190-100 CRYSTAL 4.43MHZ	1.00
X215	33-10720-1	43-08645-A11 DELAY LINE - CHROMINANCE	1.00
X213	33-13018-3	43-ZLT107-446 DELAY LINE - LUMINANCE(ELT446)	1.00
VR907	38-10732-1	20-107320-103 TRIMMER 10K OHM 0.3W B-TYPE	1.00
VR901	38-13059-1	20-130590-204 TRIMMER 200K OHM 0.3W B-TYPE	1.00
VR520	38-10729-1	20-107290-502 TRIMMER 5K OHM 0.3W B-TYPE	1.00
VR511	38-10723-1	20-107230-201 TRIMMER 200 OHM 0.3W B-TYPE	1.00
VR503	38-10723-1	20-107230-201 TRIMMER 200 OHM 0.3W B-TYPE	1.00
VR501	38-10724-1	20-107240-103 TRIMMER 10K OHM 0.3W B-TYPE	1.00
VR315	38-11239-1	20-112390-302 TRIMMER 3K OHM 0.3W B-TYPE	1.00
VR303	38-13063-1	20-130630-503 TRIMMER 50K OHM 0.3W B-TYPE	1.00
VR242	38-12574-1	20-125740-471 TRIMMER 470 OHM 0.3W B-TYPE	1.00
VR227	38-13064-1	20-130640-502 TRIMMER 5K OHM 0.3W B-TYPE	1.00
VR216	38-10729-1	20-107290-502 TRIMMER 5K OHM 0.3W B-TYPE	1.00
VR215	38-13065-1	20-130650-102 TRIMMER 1K OHM 0.3W B-TYPE	1.00
VR117	38-13064-1	20-130640-502 TRIMMER 5K OHM 0.3W B-TYPE	1.00
TU101	55-10702-6	07-00000E-T31 TUNER - UHF ET-31	1.00
T802	51-12999-1	36-129991-000 TRANSFORMER - CONVERTOR G-4B	1.00
T601	36-20174-0000	36-201740-000 TRANSFORMER - AUDIO OUTPUT	1.00
T414	51-14184-1	37-001541-38K TRANSFORMER - FLYBACK 14"	1.00
T406	51-10747-2	36-107472-000 TRANSFORMER - SIDE DFC (EI-25)	1.00
T405	51-10748-1	36-107481-000 HORIZ. DRIVE TRANSFORMER	1.00
T232	51-13099-1	38-130990-000 COIL - BURST PHASE ADJUST	1.00
T217	51-13099-1	38-130990-000 COIL - BURST PHASE ADJUST	1.00
T140	51-10750-1	38-107500-000 COIL - S.I.F. DETECTOR	1.00
T131	51-10744-1	38-107440-000 COIL - P.I.F. DETECTOR	1.00
T127	51-10744-1	38-107440-000 COIL - P.I.F. DETECTOR	1.00
T114	51-10743-1	38-107430-000 COIL - P.S.F. MATCHING	1.00
S501	73-10811-2	47-108112-000 SOCKET - CRT (12P) C5623	1.00
RT801	36-10877-2	22-C02863-602 POSISTOR PTH451 C02 B5360N	1.00
R930	36-CD103-J	RES. CARBON FILM 10K OHM 1/4W	1.00
R918	36-CD0821-J	RES. CARBON FILM 820 OHM 1/4W	1.00
R917	36-CD242-J	RES. CARBON FILM 2.4K OHM 1/4W	1.00
R916	36-CD103-J	RES. CARBON FILM 10K OHM 1/4W	1.00
R915	36-CD302-J	RES. CARBON FILM 30 OHM 1/4W	1.00
R914	36-CD0681-J	RES. CARBON FILM 680 OHM 1/4W	1.00
R913	36-CD0564-J	RES. CARBON FILM 560K OHM 1/4W	1.00
R912	36-CD106-J	RES. CARBON FILM 10M OHM 1/4W	1.00
R911	36-CD362-J	RES. CARBON FILM 3.6K OHM 1/4W	1.00
R910	36-FE153-J	RES. METAL OXIDE 15K OHM 1/2W	1.00
R907	36-CD154-J	RES. CARBON FILM 150K OHM 1/4W	1.00
R906	36-CD363-J	RES. CARBON FILM 36K OHM 1/4W	1.00
R905	36-CD362-J	RES. CARBON FILM 3.6K OHM 1/4W	1.00
R904	36-CD225-J	RES. CARBON FILM 2.2M OHM 1/4W	1.00
R903	36-CD393-J	RES. CARBON FILM 39K OHM 1/4W	1.00
R902	36-CD333-J	RES. CARBON FILM 33K OHM 1/4W	1.00
R901	36-CD244-J	RES. CARBON FILM 240K OHM 1/4W	1.00
R816	36-FF300-J	RES. METAL OXIDE 30 OHM 1W	1.00
R815	36-FE301-J	RES. METAL OXIDE 300 OHM 1/2W	1.00
R814	36-FE759-J	RES. METAL OXIDE 7.5 OHM 1/2W	1.00
R812	36-BE472-K	RES. CARBON COMPOSITION	1.00
R803	36-CE104-J	RES. CARBON FILM 100K OHM 1/2W	1.00
R802	36-CE104-J	RES. CARBON FILM 100K OHM 1/2W	1.00
R801	36-GL629-K	RES. CEMENT 6.2 OHM 10W +/-10%	1.00
R611	36-DE109-J	RES. METAL FILM 1 OHM 1/2W	1.00
R610	36-CD390-J	RES. CARBON FILM 39 OHM 1/4W	1.00
R608	36-CD561-J	RES. CARBON FILM 560 OHM 1/4W	1.00
R605	36-CD182-J	RES. CARBON FILM 1.8K OHM 1/4W	1.00
R604	36-CD183-J	RES. CARBON FILM 18K OHM 1/4W	1.00
R603	36-CD242-J	RES. CARBON FILM 2.4K OHM 1/4W	1.00
R601	36-CD272-J	RES. CARBON FILM 2.7K OHM 1/4W	1.00
R524	36-CD332-J	RES. CARBON FILM 3.3K OHM 1/4W	1.00
R523	36-CD332-J	RES. CARBON FILM 3.3K OHM 1/4W	1.00
R522	36-CD272-J	RES. CARBON FILM 2.7K OHM 1/4W	1.00
R521	36-CD272-J	RES. CARBON FILM 2.7K OHM 1/4W	1.00
R512	36-BE472-K	RES. CARBON COMPOSITION	1.00
R511	36-CD151-J	RES. CARBON FILM 150 OHM 1/4W	1.00
R510	36-CD201-J	RES. CARBON FILM 200 OHM 1/4W	1.00
R507	36-BE472-K	RES. CARBON COMPOSITION	1.00
R506	36-CD121-J	RES. CARBON FILM 120 OHM 1/4W	1.00
R505	36-CD151-J	RES. CARBON FILM 150 OHM 1/4W	1.00
R504	36-BE472-K	RES. CARBON COMPOSITION	1.00
R503	36-FG153-J	RES. METAL OXIDE 15K OHM 2W	1.00
R502	36-FG153-J	RES. METAL OXIDE 15K OHM 2W	1.00
R501	36-FG153-J	RES. METAL OXIDE 15K OHM 2W	1.00
R426	18-FE0681-JB1	RES. METAL OXIDE 680 OHM 1/2W	1.00
R425	36-CD224-J	RES. CARBON FILM 220K OHM 1/4W	1.00
R424	36-DF109-J	RES. METAL FILM 1 OHM 1W +/-5%	1.00
R423	36-DE109-J	RES. METAL FILM 1 OHM 1/2W	1.00
R422	36-EE100-J	RES. FUSIBLE 10 OHM 1/2W +/-5%	1.00
R421	36-CD103-J	RES. CARBON FILM 10K OHM 1/4W	1.00
R420	36-CD103-J	RES. CARBON FILM 10K OHM 1/4W	1.00
R418	36-FF339-J	RES. FUSIBLE 3.3 OHM 1W +/-5%	1.00
R412	36-CD202-J	RES. CARBON FILM 2K OHM 1/4W	1.00
R411	36-CE102-J	RES. CARBON FILM 1K OHM 1/2W	1.00
R407	36-CD473-J	RES. CARBON FILM 47K OHM 1/4W	1.00
R406	36-FF681-J	RES. METAL OXIDE 680 OHM 1W	1.00
R405	36-FE181-J	RES. METAL OXIDE 180 OHM 1/2W	1.00
R404	36-CD330-J	RES. CARBON FILM 33 OHM 1/4W	1.00
R403	36-CD182-J	RES. CARBON FILM 1.8K OHM 1/4W	1.00
R402	36-FH682-J	RES. METAL OXIDE 6.8K OHM 3W	1.00

Location No.	Part No.	Description
R401	36-FH242-J	18-FH0242-J11 RES. METAL OXIDE 2
R325	36-FE122-J	18-FE0122-JB1 RES. METAL OXIDE 1
R320	36-FF681-J	18-FF0681-JB1 RES. METAL OXIDE 6
R319	36-DE229-J	18-DE0229-JB1 RES. METAL FILM 2
R315	36-CD331-J	18-CD0331-JD1 RES. CARBON FILM 3
R313	36-FE821-J	18-FE0821-JB1 RES. METAL OXIDE 8
R312	36-FG100-J	18-FG0100-JH1 RES. METAL OXIDE 1
R311	36-CD103-J	18-CD0103-JD1 RES. CARBON FILM 1
R310	36-FE821-J	18-FE0821-JB1 RES. METAL OXIDE 8
R309	36-CD220-J	18-CD0220-JD1 RES. CARBON FILM 2
R308	36-CD102-J	18-CD0102-JD1 RES. CARBON FILM 1
R307	36-DF279-J	18-DF0279-JB1 RES. METAL FILM 2
R306	36-CD473-J	18-CD0473-JD1 RES. CARBON FILM 4
R305	36-CD683-J	18-CD0683-JD1 RES. CARBON FILM 6
R304	36-CD392-J	18-CD0392-JD1 RES. CARBON FILM 3
R303	36-CD823-J	18-CD0823-JD1 RES. CARBON FILM 8
R302	36-CD273-J	18-CD0273-JD1 RES. CARBON FILM 2
R301	36-CD331-J	18-CD0331-JD1 RES. CARBON FILM 3
R275	36-CD823-J	18-CD0823-JD1 RES. CARBON FILM 8
R274	36-CD184-J	18-CD0184-JD1 RES. CARBON FILM 1
R272	36-CD563-J	18-CD0563-JD1 RES. CARBON FILM 5
R271	36-CD473-J	18-CD0473-JD1 RES. CARBON FILM 4
R263	36-CD393-J	18-CD0393-JD1 RES. CARBON FILM 3
R262	36-CD822-J	18-CD0822-JD1 RES. CARBON FILM 8
R261	36-CD154-J	18-CD0154-JD1 RES. CARBON FILM 1
R260	36-CD242-J	18-CD0242-JD1 RES. CARBON FILM 2
R258	36-CD680-J	18-CD0680-JD1 RES. CARBON FILM 6
R257	36-CD821-J	18-CD0821-JD1 RES. CARBON FILM 8
R256	36-CD202-J	18-CD0202-JD1 RES. CARBON FILM 2
R255	36-CD103-J	18-CD0103-JD1 RES. CARBON FILM 1
R254	36-CD331-J	18-CD0331-JD1 RES. CARBON FILM 3
R253	36-CD101-J	18-CD0101-JD1 RES. CARBON FILM 1
R252	36-CD563-J	18-CD0563-JD1 RES. CARBON FILM 5
R251	36-CE102-J	18-CE0102-JB1 RES. CARBON FILM 1
R250	36-CD823-J	18-CD0823-JD1 RES. CARBON FILM 8
R247	36-CD153-J	18-CD0153-JD1 RES. CARBON FILM 1
R246	36-CD563-J	18-CD0563-JD1 RES. CARBON FILM 5
R245	36-FF221-J	18-FF0221-JB1 RES. METAL OXIDE 2
R244	36-CD474-J	18-CD0474-JD1 RES. CARBON FILM 4
R240	36-CD272-J	18-CD0272-JD1 RES. CARBON FILM 2
R237	36-CD561-J	18-CD0561-JD1 RES. CARBON FILM 5
R236	36-CD272-J	18-CD0272-JD1 RES. CARBON FILM 2
R235	36-CD561-J	18-CD0561-JD1 RES. CARBON FILM 5
R234	36-CD272-J	18-CD0272-JD1 RES. CARBON FILM 2
R233	36-CD561-J	18-CD0561-JD1 RES. CARBON FILM 5
R232	36-CD471-J	18-CD0471-JD1 RES. CARBON FILM 4
R231	36-CD273-J	18-CD0273-JD1 RES. CARBON FILM 2
R230	36-CD122-J	18-CD0122-JD1 RES. CARBON FILM 1
R227	36-CD273-J	18-CD0273-JD1 RES. CARBON FILM 2
R226	36-CD823-J	18-CD0823-JD1 RES. CARBON FILM 8
R225	36-CD391-J	18-CD0391-JD1 RES. CARBON FILM 3
R224	36-CD511-J	18-CD0511-JD1 RES. CARBON FILM 5
R223	36-CD201-J	18-CD0201-JD1 RES. CARBON FILM 2
R222	36-CD821-J	18-CD0821-JD1 RES. CARBON FILM 8
R216	36-CD152-J	18-CD0152-JD1 RES. CARBON FILM 1
R215	36-CD103-J	18-CD0103-JD1 RES. CARBON FILM 1
R214	36-CD162-J	18-CD0162-JD1 RES. CARBON FILM 1
R213	36-CD363-J	18-CD0363-JD1 RES. CARBON FILM 3
R212	36-CD334-J	18-CD0334-JD1 RES. CARBON FILM 3
R211	36-CD103-J	18-CD0103-JD1 RES. CARBON FILM 1
R210	36-CD182-J	18-CD0182-JD1 RES. CARBON FILM 1
R207	36-CD182-J	18-CD0182-JD1 RES. CARBON FILM 1
R206	36-CD151-J	18-CD0151-JD1 RES. CARBON FILM 1
R205	36-CD122-J	18-CD0122-JD1 RES. CARBON FILM 1
R203	36-CD331-J	18-CD0331-JD1 RES. CARBON FILM 3
R202	36-CD152-J	18-CD0152-JD1 RES. CARBON FILM 1
R140	36-CD123-J	18-CD0123-JD1 RES. CARBON FILM 1
R134	36-CD104-J	18-CD0104-JD1 RES. CARBON FILM 1
R131	36-CD222-J	18-CD0222-JD1 RES. CARBON FILM 2
R127	36-CD392-J	18-CD0392-JD1 RES. CARBON FILM 3
R121	36-CD223-J	18-CD0223-JD1 RES. CARBON FILM 2
R118	36-CD822-J	18-CD0822-JD1 RES. CARBON FILM 8
R117	36-CD561-J	18-CD0561-JD1 RES. CARBON FILM 5
R116	36-CD152-J	18-CD0152-JD1 RES. CARBON FILM 1
R114	36-CD182-J	18-CD0182-JD1 RES. CARBON FILM 1
R113	36-CD824-J	18-CD0824-JD1 RES. CARBON FILM 8
R112	36-CD302-J	18-CD0302-JD1 RES. CARBON FILM 3
R110	36-CD102-J	18-CD0102-JD1 RES. CARBON FILM 1
R109	36-CD164-J	18-CD0164-JD1 RES. CARBON FILM 1
R108	36-CD272-J	18-CD0272-JD1 RES. CARBON FILM 2
R107	36-CD221-J	18-CD0221-JD1 RES. CARBON FILM 2
R105	36-CD270-J	18-CD0270-JD1 RES. CARBON FILM 2
R104	36-CD471-J	18-CD0471-JD1 RES. CARBON FILM 4
R103	36-CD562-J	18-CD0562-JD1 RES. CARBON FILM 5
R102	36-CD102-J	18-CD0102-JD1 RES. CARBON FILM 1
R101	36-CD101-J	18-CD0101-JD1 RES. CARBON FILM 1
Q804	14-13013-1	13-OSTR54-12S IC - HYBRID STR 54
Q608	14-13069-C	11-25B562-OC1 TRANSISTOR 25B562C
Q602	14-13068-C	11-25D468-OC1 TRANSISTOR 25D468C
Q601	14-13066-C	11-25A673-OC1 TRANSISTOR 25A 673
Q503	14-12704-0	11-SC2482-001 TRANSISTOR 25C 248
Q502	14-12704-0	11-SC2482-001 TRANSISTOR 25C 248
Q501	14-12704-0	11-SC2482-001 TRANSISTOR 25C 248
Q404	14-12704-0	11-25D870-001 TRANSISTOR 25D 870
Q310	14-10759-0	11-SC2073-001 TRANSISTOR 25C 207
Q302	14-10758-0	11-SC2229-001 TRANSISTOR 25C 222
Q301	14-10760-0	11-25A940-001 TRANSISTOR 25A 94C

# CHASSIS PARTS LIST

THIS CHASSIS, READ THE "X - RAY RADIATION PRECAUTION",  
"PRODUCT SAFETY NOTICE".

be used when ordering parts, in order to assist in processing, be sure to  
description.

Quantity	Location No.	Part No.	Description	Quantity
1.00	R401	36-FH242-J	18-FH0242-J11 RES. METAL OXIDE 2.4K OHM 3W	1.00
1.00	R325	36-FE122-J	18-FE0122-J81 RES. METAL OXIDE 1.2K OHM 1/2W	1.00
1.00	R320	36-FF681-J	18-FF0681-J61 RES. METAL OXIDE 680 OHM 1W	1.00
1.00	R319	36-DE229-J	18-DE0229-J81 RES. METAL FILM 2.2 OHM 1/2W	1.00
1.00	R315	36-CD331-J	18-CD0331-J01 RES. CARBON FILM 330 OHM 1/4W	1.00
1.00	R313	36-FE821-J	18-FE0821-J81 RES. METAL OXIDE 820 OHM 1/2W	1.00
1.00	R312	36-FG100-J	18-FG0100-J41 RES. METAL OXIDE 10 OHM 2W	1.00
1.00	R311	36-CD103-J	18-CD0103-J01 RES. CARBON FILM 10K OHM 1/4W	1.00
1.00	R310	36-FE821-J	18-FE0821-J81 RES. METAL OXIDE 820 OHM 1/2W	1.00
1.00	R309	36-CD220-J	18-CD0220-J01 RES. CARBON FILM 22 OHM 1/4W	1.00
1.00	R308	36-CD102-J	18-CD0102-J01 RES. CARBON FILM 1K OHM 1/4W	1.00
1.00	R307	36-DF279-J	18-DF0279-J81 RES. METAL FILM 2.7 OHM 1W	1.00
1.00	R306	36-CD473-J	18-CD0473-J01 RES. CARBON FILM 47K OHM 1/4W	1.00
1.00	R305	36-CD683-J	18-CD0683-J01 RES. CARBON FILM 68K OHM 1/4W	1.00
1.00	R304	36-CD392-J	18-CD0392-J01 RES. CARBON FILM 3.9K OHM 1/4W	1.00
1.00	R303	36-CD823-J	18-CD0823-J01 RES. CARBON FILM 82K OHM 1/4W	1.00
1.00	R302	36-CD273-J	18-CD0273-J01 RES. CARBON FILM 27K OHM 1/4W	1.00
1.00	R301	36-CD331-J	18-CD0331-J01 RES. CARBON FILM 330 OHM 1/4W	1.00
1.00	R275	36-CD823-J	18-CD0823-J01 RES. CARBON FILM 82K OHM 1/4W	1.00
1.00	R274	36-CD184-J	18-CD0184-J01 RES. CARBON FILM 180K OHM 1/4W	1.00
1.00	R272	36-CD563-J	18-CD0563-J01 RES. CARBON FILM 56K OHM 1/4W	1.00
1.00	R271	36-CD473-J	18-CD0473-J01 RES. CARBON FILM 47K OHM 1/4W	1.00
1.00	R263	36-CD393-J	18-CD0393-J01 RES. CARBON FILM 39K OHM 1/4W	1.00
1.00	R262	36-CD822-J	18-CD0822-J01 RES. CARBON FILM 8.2K OHM 1/4W	1.00
1.00	R261	36-CD154-J	18-CD0154-J01 RES. CARBON FILM 150K OHM 1/4W	1.00
1.00	R260	36-CD242-J	18-CD0242-J01 RES. CARBON FILM 2.4K OHM 1/4W	1.00
1.00	R258	36-CD680-J	18-CD0680-J01 RES. CARBON FILM 68 OHM 1/4W	1.00
1.00	R257	36-CD821-J	18-CD0821-J01 RES. CARBON FILM 820 OHM 1/4W	1.00
1.00	R256	36-CD202-J	18-CD0202-J01 RES. CARBON FILM 2K OHM 1/4W	1.00
1.00	R255	36-CD103-J	18-CD0103-J01 RES. CARBON FILM 10K OHM 1/4W	1.00
1.00	R254	36-CD331-J	18-CD0331-J01 RES. CARBON FILM 330 OHM 1/4W	1.00
1.00	R253	36-CD101-J	18-CD0101-J01 RES. CARBON FILM 100 OHM 1/4W	1.00
1.00	R252	36-CD563-J	18-CD0563-J01 RES. CARBON FILM 56K OHM 1/4W	1.00
1.00	R251	36-CE102-J	18-CE0102-J81 RES. CARBON FILM 1K OHM 1/2W	1.00
1.00	R250	36-CD823-J	18-CD0823-J01 RES. CARBON FILM 82K OHM 1/4W	1.00
1.00	R247	36-CD153-J	18-CD0153-J01 RES. CARBON FILM 15K OHM 1/4W	1.00
1.00	R246	36-CD563-J	18-CD0563-J01 RES. CARBON FILM 56K OHM 1/4W	1.00
1.00	R245	36-FF221-J	18-FF0221-J61 RES. METAL OXIDE 220 OHM 1W	1.00
1.00	R241	36-CD474-J	18-CD0474-J01 RES. CARBON FILM 470K OHM 1/4W	1.00
1.00	R240	36-CD272-J	18-CD0272-J01 RES. CARBON FILM 2.7K OHM 1/4W	1.00
1.00	R237	36-CD561-J	18-CD0561-J01 RES. CARBON FILM 560 OHM 1/4W	1.00
1.00	R236	36-CD272-J	18-CD0272-J01 RES. CARBON FILM 2.7K OHM 1/4W	1.00
1.00	R235	36-CD561-J	18-CD0561-J01 RES. CARBON FILM 560 OHM 1/4W	1.00
1.00	R234	36-CD272-J	18-CD0272-J01 RES. CARBON FILM 2.7K OHM 1/4W	1.00
1.00	R233	36-CD561-J	18-CD0561-J01 RES. CARBON FILM 560 OHM 1/4W	1.00
1.00	R232	36-CD471-J	18-CD0471-J01 RES. CARBON FILM 470 OHM 1/4W	1.00
1.00	R231	36-CD273-J	18-CD0273-J01 RES. CARBON FILM 27K OHM 1/4W	1.00
1.00	R230	36-CD122-J	18-CD0122-J01 RES. CARBON FILM 1.2K OHM 1/4W	1.00
1.00	R227	36-CD273-J	18-CD0273-J01 RES. CARBON FILM 27K OHM 1/4W	1.00
1.00	R226	36-CD823-J	18-CD0823-J01 RES. CARBON FILM 82K OHM 1/4W	1.00
1.00	R225	36-CD391-J	18-CD0391-J01 RES. CARBON FILM 390 OHM 1/4W	1.00
1.00	R224	36-CD511-J	18-CD0511-J01 RES. CARBON FILM 510 OHM 1/4W	1.00
1.00	R223	36-CD201-J	18-CD0201-J01 RES. CARBON FILM 200 OHM 1/4W	1.00
1.00	R222	36-CD821-J	18-CD0821-J01 RES. CARBON FILM 820 OHM 1/4W	1.00
1.00	R216	36-CD152-J	18-CD0152-J01 RES. CARBON FILM 1.5K OHM 1/4W	1.00
1.00	R215	36-CD103-J	18-CD0103-J01 RES. CARBON FILM 10K OHM 1/4W	1.00
1.00	R214	36-CD162-J	18-CD0162-J01 RES. CARBON FILM 1.6K OHM 1/4W	1.00
1.00	R213	36-CD363-J	18-CD0363-J01 RES. CARBON FILM 36K OHM 1/4W	1.00
1.00	R212	36-CD334-J	18-CD0334-J01 RES. CARBON FILM 330K OHM 1/4W	1.00
1.00	R211	36-CD103-J	18-CD0103-J01 RES. CARBON FILM 10K OHM 1/4W	1.00
1.00	R210	36-CD182-J	18-CD0182-J01 RES. CARBON FILM 1.8K OHM 1/4W	1.00
1.00	R207	36-CD182-J	18-CD0182-J01 RES. CARBON FILM 1.8K OHM 1/4W	1.00
1.00	R206	36-CD151-J	18-CD0151-J01 RES. CARBON FILM 150 OHM 1/4W	1.00
1.00	R205	36-CD122-J	18-CD0122-J01 RES. CARBON FILM 1.2K OHM 1/4W	1.00
1.00	R203	36-CD331-J	18-CD0331-J01 RES. CARBON FILM 330 OHM 1/4W	1.00
1.00	R202	36-CD152-J	18-CD0152-J01 RES. CARBON FILM 1.5K OHM 1/4W	1.00
1.00	R140	36-CD123-J	18-CD0123-J01 RES. CARBON FILM 12K OHM 1/4W	1.00
1.00	R134	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM 1/4W	1.00
1.00	R131	36-CD222-J	18-CD0222-J01 RES. CARBON FILM 2.2K OHM 1/4W	1.00
1.00	R127	36-CD392-J	18-CD0392-J01 RES. CARBON FILM 3.9K OHM 1/4W	1.00
1.00	R121	36-CD223-J	18-CD0223-J01 RES. CARBON FILM 22K OHM 1/4W	1.00
1.00	R118	36-CD822-J	18-CD0822-J01 RES. CARBON FILM 8.2K OHM 1/4W	1.00
1.00	R117	36-CD561-J	18-CD0561-J01 RES. CARBON FILM 560 OHM 1/4W	1.00
1.00	R116	36-CD152-J	18-CD0152-J01 RES. CARBON FILM 1.5K OHM 1/4W	1.00
1.00	R114	36-CD182-J	18-CD0182-J01 RES. CARBON FILM 1.8K OHM 1/4W	1.00
1.00	R113	36-CD824-J	18-CD0824-J01 RES. CARBON FILM 820K OHM 1/4W	1.00
1.00	R112	36-CD302-J	18-CD0302-J01 RES. CARBON FILM 3K OHM 1/4W	1.00
1.00	R110	36-CD102-J	18-CD0102-J01 RES. CARBON FILM 1K OHM 1/4W	1.00
1.00	R109	36-CD164-J	18-CD0164-J01 RES. CARBON FILM 160K OHM 1/4W	1.00
1.00	R108	36-CD272-J	18-CD0272-J01 RES. CARBON FILM 2.7K OHM 1/4W	1.00
1.00	R107	36-CD221-J	18-CD0221-J01 RES. CARBON FILM 220 OHM 1/4W	1.00
1.00	R105	36-CD270-J	18-CD0270-J01 RES. CARBON FILM 27 OHM 1/4W	1.00
1.00	R104	36-CD471-J	18-CD0471-J01 RES. CARBON FILM 470 OHM 1/4W	1.00
1.00	R103	36-CD562-J	18-CD0562-J01 RES. CARBON FILM 5.6K OHM 1/4W	1.00
1.00	R102	36-CD102-J	18-CD0102-J01 RES. CARBON FILM 1K OHM 1/4W	1.00
1.00	R101	36-CD101-J	18-CD0101-J01 RES. CARBON FILM 100 OHM 1/4W	1.00
1.00	Q804	14-13013-1	13-OSTRS4A-12S IC - HYBRID STR 5412	1.00
1.00	Q608	14-13069-C	11-2SB562-OC1 TRANSISTOR 2SB562C (LF, POWER	1.00
1.00	Q602	14-13068-C	11-2SD468-OC1 TRANSISTOR 2SD468C (LF, POWER	1.00
1.00	Q601	14-13066-C	11-2SA673-OC1 TRANSISTOR 2SA 673-C	1.00
1.00	Q503	14-12704-0	11-SC2482-001 TRANSISTOR 2SC 2482	1.00
1.00	Q502	14-12704-0	11-SC2482-001 TRANSISTOR 2SC 2482	1.00
1.00	Q501	14-12704-0	11-SC2482-001 TRANSISTOR 2SC 2482	1.00
1.00	Q405	14-12778-0	11-2SD870-001 TRANSISTOR 2SD 870	1.00
1.00	Q404	14-12704-0	11-SC2482-001 TRANSISTOR 2SC 2482	1.00
1.00	Q310	14-10759-0	11-SC2073-001 TRANSISTOR 2SC 2073	1.00
1.00	Q302	14-10758-0	11-SC2229-001 TRANSISTOR 2SC 2229-0	1.00
1.00	Q301	14-10760-0	11-2SA940-001 TRANSISTOR 2SA 940	1.00

Location No.	Part No.	Description
Q253	14-10757-0	11-A562TM-001 TRANSISTOR 2SA
Q101	14-10754-0	11-SC388A-TM1 TRANSISTOR 2SC
P902	74-10964-6	46-10964W-06C POLE PIN BASE*
P901	74-12866-6	46-12866W-02C POLE PIN BASE*
P802	74-10962-2	46-10962W-02B POLE PIN BASE*
P801	74-11376-6	46-11376W-03C POLE PIN BASE*
P602	74-12866-6	46-12866W-02C POLE PIN BASE*
P402	74-12866-6	46-12866W-02C POLE PIN BASE*
P401	74-12876-6	46-12876W-06C POLE PIN BASE*
P270	46-12210-W03C	46-12210W-03C PIN BASE - 3 P
P201	74-10967-2	46-10967W-01B SINGLE PIN BASE*
P102	74-10960-6	46-10960W-04C PIN BASE 4 FOL
P101A	74-12866-6	46-12866W-02C POLE PIN BASE*
L811	51-13001-1	36-130010-000 COIL - CHOKE 6
L807	51-12000-1	36-120000-000 COIL - CHOKE 6
L501	51-10709-1	36-107090-000 COIL - FL-33 05
L418	51-10739-1	36-107390-000 COIL - CHOKE 0
L414	51-13973-1	35-139730-000 FERRITE BEAD B
L413	51-13973-1	35-139730-000 FERRITE BEAD B
L412	51-14012-1	36-140121-000 COIL - CHOKE 0
L410	51-10738-1	36-107380-000 COIL - FL-1 05P
L406	51-13058-1	36-130580-000 COIL - LINEARIT
L403	51-10738-1	36-107380-000 COIL - FL-1 05P
L224	51-11157-1	36-111570-000 COIL - FL-320 0
L215	51-10710-1	36-107100-000 COIL - FL-8.2 0
L210	51-10709-1	36-107090-000 COIL - FL-33 05
L205	51-10712-1	36-107120-000 COIL - FL-15 05
L133	51-10709-1	36-107090-000 COIL - FL-33 05
L124	51-10733-1	36-107330-000 COIL - FL-5.6 0
L104	51-10735-1	36-107350-000 COIL - CHOKE 0
L101	51-10734-1	36-107340-000 COIL - MATCHING
IC201	14-13011-1	13-TA7698-AFP I.C. TA7698AP
IC101	14-13010-1	13-TA7681-AFP I.C. TA7681AP
D904	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D816	14-12996-1	10-000RH1-E21 DIODE RH 1 (FAS
D814	14-12996-1	10-000RH1-E21 DIODE RH 1 (FAS
D813	14-12998-1	10-00SR2M-021 DIODE SR-2M (AL
D811	14-13014-1	10-000R62-E21 DIODE RG 2 (FAS
D810	14-10625-1	10-0BA157-E21 DIODE BA 157 (F
D801	14-12995-1	10-0RB156-E21 DIODE RB-156
D605	14-10273-1	10-1N4148-A21 DIODE 1N4148 (S
D430	10-85C30-V021	10-85C30V-021 DIODE - ZENER 3
D426	14-10625-1	10-0BA157-E21 DIODE BA 157 (F
D420	14-10764-1	10-S52953-E21 DIODE S 52953 (F
D418	14-10764-2	10-S52956-E21 DIODE S52956 (F
D415	14-10764-2	10-S52956-E21 DIODE S52956 (F
D411	14-10766-1	10-1S1887-E21 DIODE 1S 1887 (
D402	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D316	14-14011-1	10-1N4002-E21 DIODE 1N4002 (S
D315	14-10273-1	10-1N4148-A21 DIODE 1N4148 (S
D313	14-10765-1	10-1S2775-E21 DIODE 1S 2775 (
D312	14-10765-1	10-1S2775-E21 DIODE 1S 2775 (
D310	14-10766-1	10-1S1887-E21 DIODE 1S 1887 (
D302	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D301	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D255	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D254	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D253	14-10270-1	10-01N60P-A21 DIODE - GERMANI
D251	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D250	14-11406-1	10-83C12V-D21 DIODE - ZENER 1
D243	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D241	14-10718-1	10-1S1555-A21 DIODE - SWITCH
D216	14-10718-1	10-1S1555-A21 DIODE - SWITCH
C916	25-BF478-Y	25-BF478-Y-U11 CAP. ELECTROLYT
C915	46-PF152-J	27-PB0152-J01 CAP. POLYESTER
C914	46-PF333-J	27-PB0333-J01 CAP. POLYESTER
C913	46-PF153-J	27-PB0153-J01 CAP. POLYESTER
C912	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYT
C911	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYT
C910	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYT
C907	46-KF302-J	27-KB0302-J01 CAP. POLYESTER
C906	46-PF562-J	27-PB0562-J01 CAP. POLYESTER
C905	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.0
C904	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.0
C903	44-AF152-K	26-AB0152-KB1 CAP. CERAMIC 150
C902	46-PF224-J	27-PB0224-J01 CAP. POLYESTER
C901	49-BE229-K	25-BE0229-K31 CAP. TANTALUM 2.
C820	46-MM104-K	27-MH0104-K01 CAP. METALLIZED
C816	44-AF102-K	26-AM0102-KB1 CAP. CERAMIC 100
C815	42-BH100-Y	25-BH0100-U11 CAP. ELECTROLYT
C814	44-AL681-K	26-A10681-KB1 CAP. CERAMIC 680
C813	42-BJ470-Y	25-BJ0470-U11 CAP. ELECTROLYT
C812	44-AF102-K	26-AM0102-KB1 CAP. CERAMIC 100
C811	44-AF102-K	26-AM0102-KB1 CAP. CERAMIC 100
C810	42-BF100-Y	25-BF0100-U11 CAP. ELECTROLYT
C807	44-AL102-K	26-A10102-KB1 CAP. CERAMIC 10
C806	42-BM121-M	25-BM0121-M11 CAP. ELECTROLYT



Location No.	Part No.	Description	Quantity
Q253	14-10757-0	11-A562TM-001 TRANSISTOR 2SA 562TM-0	1.00
Q101	14-10754-0	11-SC388A-TM1 TRANSISTOR 2SC 388 ATM	1.00
F902	74-10964-6	46-10964W-06C POLE PIN BASE+6 WP9006	1.00
F901	74-12866-6	46-12866W-02C POLE PIN BASE+2 WP9002	1.00
F902	74-10962-2	46-10962W-02B POLE PIN BASE+2 RTB-1.5-2	1.00
F901	74-11376-6	46-11376W-03C POLE PIN BASE+3 WP3003	1.00
F902	74-12866-6	46-12866W-02C POLE PIN BASE+2 WP9002	1.00
F402	74-12866-6	46-12866W-02C POLE PIN BASE+2 WP9002	1.00
F401	74-12876-6	46-12876W-06C POLE PIN BASE+6 RTB-1.5-6	1.00
F270	46-12210-W03C	POLE PIN BASE - 3 POLE WP9003	1.00
F201	74-10967-2	46-10967W-01B SINGLE PIN BASE RT-01N-2.3A	1.00
F102	74-10960-6	46-10960W-04C POLE PIN BASE 4 POLE WP9004	1.00
F101A	74-12866-6	46-12866W-02C POLE PIN BASE+2 WP9002	1.00
L811	51-13001-1	36-130010-000 COIL - CHOKE 6.5MM (10UH)	1.00
L807	51-12000-1	36-120000-000 COIL - CHOKE 6.5MM (10UH)	1.00
L501	51-10709-1	36-107090-000 COIL - FL-33 05MM (33UH)	1.00
L418	51-10739-1	36-107390-000 COIL - CHOKE 010MM (100UH)	1.00
L414	51-13973-1	35-139730-000 FERRITE BEAD BF60	1.00
L413	51-13973-1	35-139730-000 FERRITE BEAD BF60	1.00
L412	51-14012-1	36-140121-000 COIL - CHOKE (0.6 UH)	1.00
L410	51-10738-1	36-107380-000 COIL - PL-1 05MM (1UH)	1.00
L406	51-13058-1	36-130580-000 COIL - LINEARITY 010MM (39UH)	1.00
L403	51-10738-1	36-107380-000 COIL - PL-1 05MM (1UH)	1.00
L224	51-11157-1	36-111570-000 COIL - PL-220 05MM (220UH)	1.00
L215	51-10710-1	36-107100-000 COIL - PL-9.2 05MM (8.2UH)	1.00
L210	51-10709-1	36-107090-000 COIL - FL-33 05MM (33UH)	1.00
L205	51-10712-1	36-107120-000 COIL - PL-15 05MM (15UH)	1.00
L133	51-10709-1	36-107090-000 COIL - FL-33 05MM (33UH)	1.00
L124	51-10733-1	36-107330-000 COIL - PL-5.6 DIA 5MM (5.6UH)	1.00
L104	51-10735-1	36-107350-000 COIL - CHOKE (0.9UH)	1.00
L101	51-10734-1	36-107340-000 COIL - MATCHING COIL	1.00
IC201	14-13011-1	13-TA7698-APP I.C. TA7698AP	1.00
IC101	14-13010-1	13-TA7681-APP I.C. TA7681AP	1.00
D904	14-10718-1	10-1S1555-A21 DIODE - SWITCHING IS 1555	1.00
D816	14-12996-1	10-000RH1-E21 DIODE RH 1 (FAST RECOVERY)	1.00
D814	14-12996-1	10-000RH1-E21 DIODE RH 1 (FAST RECOVERY)	1.00
D813	14-12998-1	10-00SR2M-D21 DIODE SR-2M (AVALANCHE)	1.00
D811	14-13014-1	10-000RG2-E21 DIODE RG 2 (FAST RECOVERY)	1.00
D810	14-10625-1	10-0BA157-E21 DIODE BA 157 (FAST RECOVERY)	1.00
D801	14-12995-1	10-0RB156-E21 DIODE RB-156	1.00
D605	14-10273-1	10-IN4148-A21 DIODE IN4148 (SWITCHING)	1.00
D430	10-B5C30-V021	10-B5C30V-021 DIODE - ZENER 30V 5% 1.3W	1.00
D426	14-10625-1	10-0BA157-E21 DIODE BA 157 (FAST RECOVERY)	1.00
D420	14-10764-1	10-S5295J-E21 DIODE S 5295J (FAST RECOVERY)	1.00
D418	14-10764-2	10-S5295G-E21 DIODE S5295G (FAST RECOVERY)	1.00
D415	14-10764-2	10-S5295G-E21 DIODE S5295G (FAST RECOVERY)	1.00
D411	14-10766-1	10-S1887-E21 DIODE IS 1887 (RECTIFIER)	1.00
D402	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D316	14-14011-1	10-IN4002-E21 DIODE IN4002 (RECTIFIER)	1.00
D315	14-10273-1	10-IN4148-A21 DIODE IN4148 (SWITCHING)	1.00
D313	14-10765-1	10-IS2775-E21 DIODE IS 2775 (FAST RECOVERY)	1.00
D312	14-10765-1	10-IS2775-E21 DIODE IS 2775 (FAST RECOVERY)	1.00
D310	14-10766-1	10-S1887-E21 DIODE IS 1887 (RECTIFIER)	1.00
D302	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D301	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D255	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D254	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D253	14-10270-1	10-01N60P-A21 DIODE - GERMANIUM IN 60P	1.00
D251	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D250	14-11406-1	10-83C12V-021 DIODE - ZENER 12V 5% 1/2W	1.00
D243	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D241	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D216	14-10718-1	10-S1555-A21 DIODE - SWITCHING IS 1555	1.00
D230	42-BF478-Y	25-BF0478-U11 CAP. ELECTROLYTIC 0.47 UF 50V	1.00
D216	46-PF152-J	27-PBD152-J01 CAP. POLYESTER 0.0015 UF 50V	1.00
D215	46-PF333-J	27-PBD333-J01 CAP. POLYESTER 0.033 UF 50V	1.00
D214	46-PF153-J	27-PBD153-J01 CAP. POLYESTER 0.015 MFD 50V	1.00
D213	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	1.00
D212	42-BF478-Y	25-BF0478-U11 CAP. ELECTROLYTIC 0.47 UF 50V	1.00
D211	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	1.00
D210	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	1.00
D207	46-KF302-J	27-KBD302-J01 CAP. POLYESTER-POLYPROPYLENE	1.00
D206	46-PF562-J	27-PBD562-J01 CAP. POLYESTER 0.0056 UF 50V	1.00
D205	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	1.00
D204	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	1.00
D203	44-AF152-K	26-AB0152-KB1 CAP. CERAMIC 1500 PF 50V	1.00
D202	46-PF224-J	27-PBD224-J01 CAP. POLYESTER 0.22 UF 50V	1.00
D201	49-BE229-K	25-BE0229-K31 CAP. TANTALUM 2.2 MFD 35V	1.00
D200	46-MM104-K	27-PMD104-K01 CAP. METALLIZED POLYESTER	1.00
D816	44-AP102-K	26-AM0102-KB1 CAP. CERAMIC 1000 PF 2KV	1.00
D815	42-BH100-Y	25-BH0100-U11 CAP. ELECTROLYTIC 10 UF 100V	1.00
D814	44-AL681-K	26-A10681-KB1 CAP. CERAMIC 680 PF 500V	1.00
D813	42-BJ470-Y	25-BJ0470-U11 CAP. ELECTROLYTIC 47 MFD 160V	1.00
D812	44-AP102-K	26-AM0102-KB1 CAP. CERAMIC/1000 PF 2KV	1.00
D811	44-AP102-K	26-AM0102-KB1 CAP. CERAMIC/1000 PF 2KV	1.00
D810	42-BF100-Y	25-BF0100-U11 CAP. ELECTROLYTIC 10 MFD 50V	1.00
D807	44-AL102-K	26-A10102-KB1 CAP. CERAMIC (DISC TYPE)	1.00
D806	42-BM121-M	25-BM0121-M11 CAP. ELECTROLYTIC 120 UF 400V	1.00
D805	44-AQ472-Z	26-AQ0472-ZF1 CAP. CERAMIC (DISC TYPE)	1.00
D804	44-AQ472-Z	26-AQ0472-ZF1 CAP. CERAMIC (DISC TYPE)	1.00
D803	44-AQ472-Z	26-AQ0472-ZF1 CAP. CERAMIC (DISC TYPE)	1.00
D802	44-AQ472-Z	26-AQ0472-ZF1 CAP. CERAMIC (DISC TYPE)	1.00
D801	46-M0223-M	27-MGA223-M01 CAP. METALLIZED POLYESTER	1.00
D608	42-BC102-Y	25-BC0102-U11 CAP. ELECTROLYTIC 1000 MFD 16V	1.00
D604	46-PF562-J	27-PBD562-J01 CAP. POLYESTER 0.0056 UF 50V	1.00
D602	42-BD471-Y	25-BD0471-U11 CAP. ELECTROLYTIC 470 MFD 25V	1.00
D601	42-BF229-Y	25-BF0229-U11 CAP. ELECTROLYTIC 2.2 MFD 50V	1.00
D512	44-AF102-K	26-AB0102-KB1 CAP. CERAMIC 1000 PF 50V	1.00
D511	44-AF221-J	26-AB0221-JZ1 CAP. CERAMIC 220 PF 50V +/-5%	1.00
D510	44-AF102-K	26-AB0102-KB1 CAP. CERAMIC 1000 PF 50V	1.00
D507	44-AF221-J	26-AB0221-JZ1 CAP. CERAMIC 220 PF 50V +/-5%	1.00
D506	44-AF221-J	26-AB0221-JZ1 CAP. CERAMIC 220 PF 50V +/-5%	1.00
D505	44-AF102-K	26-AB0102-KB1 CAP. CERAMIC 1000 PF 50V	1.00
D504	44-AN331-M	26-AK0331-MB1 CAP. CERAMIC 330 PF 1000V	1.00
D503	44-AF181-J	26-AB0181-JZ1 CAP. CERAMIC 180 PF 50V +/-5%	1.00
D502	44-AF181-J	26-AB0181-JZ1 CAP. CERAMIC 180 PF 50V +/-5%	1.00
D501	44-AF181-J	26-AB0181-JZ1 CAP. CERAMIC 180 PF 50V +/-5%	1.00
D426	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	1.00
D424	46-MK124-K	27-MFD124-K01 CAP. METALLIZED POLYESTER	1.00
D423	46-RG563-J	27-RGD563-J01 CAP. POLYPROPYLENE 0.056 UF	1.00
D420	44-AL681-K	26-A10681-KB1 CAP. CERAMIC 680 PF 500V	1.00
D419	44-AL221-K	26-A10221-KB1 CAP. CERAMIC 220PF 500V	1.00
D418	42-BC222-Y	25-BC0222-U11 CAP. ELECTROLYTIC 2200 MFD 16V	1.00
D417	42-BG101-Y	25-BG0101-U11 CAP. ELECTROLYTIC 100 MFD 63V	1.00
D416	42-BL100-Y	25-BL0100-U11 CAP. ELECTROLYTIC 10 MFD 250V	1.00
D415	44-AL221-K	26-A10221-KB1 CAP. CERAMIC 220PF 500V	1.00
D413	46-RF762-J	27-RLD762-J01 CAP. POLYPROPYLENE 0.0076 UF	1.00
D412	42-BF478-Y	25-BF0478-U11 CAP. ELECTROLYTIC 0.47 UF 50V	1.00
D411	46-RL394-J	27-RGD394-J01 CAP. POLYPROPYLENE 0.39 UF	1.00
D406	44-AF222-K	26-AB0222-KB1 CAP. CERAMIC 2200 PF 50V	1.00

Location No	Part No.	Description	Qua
C405	44-AF221-K	26-AM0221-KB1 CAP. CERAMIC 220 PF 2KV	
C404	44-AL681-K	26-A10681-KB1 CAP. CERAMIC 680 PF 500V	
C403	42-BF100-Y	25-BF0100-U11 CAP. ELECTROLYTIC 10 MFD 50V	
C402	42-BF478-Y	25-BF0478-U11 CAP. ELECTROLYTIC 0.47 UF 50V	
C401	44-AL103-K	26-A10103-KB1 CAP. CERAMIC (DISC TYPE)	
C326	42-FC240-K	25-FC0240-K11 CAP. ELECTROLYTIC 24 UF 16V	
C312	46-RL333-J	27-RGD333-J01 CAP. POLYPROPYLENE 0.033 UF	
C311	42-BF221-Y	25-BF0221-U11 CAP. ELECTROLYTIC 220 MFD 50V	
C310	42-BJ479-Y	25-BJ0479-U11 CAP. ELECTROLYTIC 4.7 MFD 160V	
C307	49-BE229-K	25-BE0229-K31 CAP. TANTALUM 2.2 MFD 35V	
C306	44-AL332-M	26-A10332-MB1 CAP. CERAMIC 3300 PF 500V	
C302	42-BF100-Y	25-BF0100-U11 CAP. ELECTROLYTIC 10 MFD 50V	
C301	44-AL221-K	26-A10221-KB1 CAP. CERAMIC 220PF 500V	
C280	44-AF109-C	26-AB0109-CZ1 CAP. CERAMIC 1 PF 50V +/-0.25%	
C272	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	
C271	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	
C262	42-BF479-Y	25-BF0479-U11 CAP. ELECTROLYTIC 4.7 MFD 50V	
C257	44-AF180-J	26-AB0180-JZ1 CAP. CERAMIC 18 PF 50V +/-5%	
C253	44-AF561-K	26-AB0561-KZ1 CAP. CERAMIC (DISC TYPE)	
C252	44-AF300-J	26-AB0300-JZ1 CAP. CERAMIC 30 PF 50V +/-5%	
C251	44-AF301-K	26-AB0301-KZ1 CAP. CERAMIC 300 PF 50V +/-10%	
C243	42-BE220-Y	25-BE0220-U11 CAP. ELECTROLYTIC 22 MFD 35V	
C242	46-PF822-J	27-PBD822-J01 CAP. POLYESTER 0.0082 UF 50V	
C232	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C231	46-NF223-K	27-NBD223-K01 CAP. POLYESTER (NON-INDUCTIVE)	
C230	46-NF223-K	27-NBD223-K01 CAP. POLYESTER (NON-INDUCTIVE)	
C228	42-BC331-Y	25-BC0331-U11 CAP. ELECTROLYTIC 330 MFD 16V	
C227	42-BF479-Y	25-BF0479-U11 CAP. ELECTROLYTIC 4.7 MFD 50V	
C225	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C224	44-AF680-J0	26-AB0680-JC1 CAP. CERAMIC 68 PF 50V +/-5%	
C223	44-AF220-J0	26-AB0220-JC1 CAP. CERAMIC 22 PF 50V +/-5%	
C222	44-AF200-J	26-AB0200-JZ1 CAP. CERAMIC 20 PF 50V +/-5%	
C221	42-BF478-Y	25-BF0478-U11 CAP. ELECTROLYTIC 0.47 UF 50V	
C220	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C219	44-AF180-J	26-AB0180-JZ1 CAP. CERAMIC 18 PF 50V +/-5%	
C218	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C217	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C216	44-AF121-J3	26-AB0121-JP1 CAP. CERAMIC 120 PF 50V +/-5%	
C215	42-BE220-Y	25-BE0220-U11 CAP. ELECTROLYTIC 22 MFD 35V	
C214	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C213	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	
C212	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	
C210	44-AF120-J	26-AB0120-JZ1 CAP. CERAMIC 12 PF 50V +/-5%	
C207	42-BC101-Y	25-BC0101-U11 CAP. ELECTROLYTIC 100 MFD 16V	
C206	46-PF473-J	27-PBD473-J01 CAP. POLYESTER 0.047 UF 50V	
C205	44-AF181-J	26-AB0181-JZ1 CAP. CERAMIC 180 PF 50V +/-5%	
C161	42-BF479-Y	25-BF0479-U11 CAP. ELECTROLYTIC 4.7 MFD 50V	
C144	46-PF104-J	27-PBD104-J01 CAP. POLYESTER 0.1 UF 50V	
C140	44-AF470-J0	26-AB0470-JC1 CAP. CERAMIC 47 PF 50V +/-5%	
C136	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C134	46-PF102-J	27-PBD102-J01 CAP. POLYESTER 0.001 UF 50V	
C133	44-AF222-K	26-AB0222-KB1 CAP. CERAMIC 2200 PF 50V	
C132	42-BC470-Y	25-BC0470-U11 CAP. ELECTROLYTIC 47 MFD 16V	
C131	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C130	44-AF209-C	26-AB0209-CZ1 CAP. CERAMIC 2 PF 50V +/-0.25	
C128	46-NF474-J	27-NBD474-J01 CAP. POLYESTER 0.47 UF 50V	
C127	44-AF150-J	26-AB0150-JZ1 CAP. CERAMIC 15 PF 50V +/-5%	
C126	44-AF209-C	26-AB0209-CZ1 CAP. CERAMIC 2 PF 50V +/-0.25	
C125	44-AF102-Z	26-AB0102-ZF1 CAP. CERAMIC 1N 50V +80-20%	
C124	44-AF102-Z	26-AB0102-ZF1 CAP. CERAMIC 1N 50V +80-20%	
C123	44-AF470-J	26-AB0470-JZ1 CAP. CERAMIC 47 PF 50V +/-5%	
C119	42-BC331-Y	25-BC0331-U11 CAP. ELECTROLYTIC 330 MFD 16V	
C118	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C117	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C116	42-BE220-Y	25-BE0220-U11 CAP. ELECTROLYTIC 22 MFD 35V	
C115	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C114	44-AF102-Z	26-AB0102-ZF1 CAP. CERAMIC 1N 50V +80-20%	
C113	44-AF102-Z	26-AB0102-ZF1 CAP. CERAMIC 1N 50V +80-20%	
C112	44-AF102-Z	26-AB0102-ZF1 CAP. CERAMIC 1N 50V +80-20%	
C110	42-BF479-Y	25-BF0479-U11 CAP. ELECTROLYTIC 4.7 MFD 50V	
C107	42-BE220-Y	25-BE0220-U11 CAP. ELECTROLYTIC 22 MFD 35V	
C106	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C105	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
C101	44-AF103-Z	26-AB0103-ZF1 CAP. CERAMIC 0.01 UF 50V	
82-14157-1	67-141570-0E7	HOLDER - FLYBACK	1.
82-13129-1	67-131290-0E4	BRACKET - HEAT SINK	1.
82-13051-3	67-130510-3E4	BRACKET - MAIN BOARD	1.
82-13050-1	67-130500-0T0	SHIELD CAN - I.F.	1.
82-10918-4	*****	HEAT SINK	2.
74-11383-2	46-113830H-018	POLE HOUSING*1 SIP-LV VIOLET	1.
71-14182-1	63-P35080-084	SCREW TR 3.5 X 8 (B)	4.
71-13169-1	63-P40120-AB4	SCREW TR 4 X 12	1.
71-13016	64-P30120-102	SCREW MR 3 X 12	2.
71-12860	64-B30060-102	SCREW SMB 3 X 6	2.
71-12860	64-B30060-102	SCREW SMB 3 X 6	2.
71-12350	65-E33055-07E	METAL SPRING WASHER 3.3 X 3.5	1.
71-11064	65-Z35060-26E	NUT M 3.5	1.
71-10998	65-A40090-06E	WASHER - 4 X 9	1.
71-10998	65-A40090-06E	WASHER - 4 X 9	2.
71-10997-A	63-P33100-AB4	SCREW TR 3.5 X 10	1.
71-10991	64-P35080-104	SCREW MR 3.5 X 8	2.
71-10493	65-Z30050-23E	SCREW NUT M3	2.
40-20176-10AA	40-201761-0AA	PCB - MAIN BOARD + CRT BOARD	1.
20-13666-3	41-BF0090-3BB	SOLID WIRE #24 UL 1007 90HM	1.
20-13615-0	41-BF0180-0BB	SOLID WIRE #24 UL 1007 180HM	1.
20-13610-9	41-BF0280-9BB	SOLID WIRE #24 UL 1007 280HM	1.
20-13605-1	62-136050-00F	WIRE CLAMPER	1.
20-13579-7	41-BF0280-7BB	WIRE #24 UL 1007 280HM 5.5	1.
20-13553-1	41-BF0540-1BB	SOLID WIRE #24 UL 1007 540HM	1.
20-13171-5	41-BC0400-5EB	WIRE #18 UL 1007 GREEN	1.
20-13163-0	41-BF0065-0BB	SOLID WIRE #24 UL 1007 BLACK	1.
20-13162-1	41-DE0260-1BB	WIRE #22 UL 1015 BROWN	1.
20-13161-3	41-DE0065-3BB	WIRE #22 UL 1015 ORANGE	1.
20-13161-3	41-DE0065-3BB	WIRE #22 UL 1015 ORANGE	1.
20-13005-2	41-BF0170-2BB	AWG 24 UL 1007 170HM RED 5/5	1.
20-12691-5	41-BC0340-5BB	AWG 18 UL 1007 340HM GREEN	1.
20-12671-2	41-BF0060-6BB	AWG 24 UL 1007 (7/C) 60HM RED	1.
20-12326-4	41-BF0200-4BB	AWG 24 UL 1007 200HM YELLOW	1.
20-12300-4	41-BF0370-4BB	AWG 24 UL 1007 370HM YELLOW	1.
20-12299-5	41-BF0370-5BB	AWG 24 UL 1007 370HM GREEN	1.
20-11984-2	41-BF0400-2BB	AWG 24 UL 1007 400HM RED	1.
20-11984-2	41-BF0400-2BB	AWG 24 UL 1007 400HM RED	1.
20-11981-6	41-BF0400-6BB	AWG 24 UL 1007 400HM BLUE	1.
20-11980-0	41-BF0400-0BB	AWG 24 UL 1007 400HM BLACK	1.
20-11409-7	41-BF0380-7BB	AWG 24 UL 1007 380HM VIOLET	1.
20-11049-2	41-BF0090-2BB	AWG 24 UL 1007 (7/C) 90HM RED	1.
20-11047-8	41-BF0110-8BB	SOLID WIRE #24 UL 1007 GREY	1.
20-11043-3	41-BF0160-3BB	AWG 24 UL 1007 (7/C) 160HM	1.
20-10654-2	62-106540-00F	UNITE 2.5 X 95 MM	30.
20-10168-1	41-AE3000-855	TINNED COPPER WIRE	1.
11-11273-1	62-112730-0HA	COVER - TRANSISTOR	1.

Location No.	Part No.	Description	Quantity
44-AF221-K	26-AM0221-KB1	CAP. CERAMIC 220 PF 2KV	1.00
44-AL681-K	26-A10681-KB1	CAP. CERAMIC 680 PF 500V	1.00
42-BF100-Y	25-BF0100-U11	CAP. ELECTROLYTIC 10 MFD 50V	1.00
42-BF478-Y	25-BF0478-U11	CAP. ELECTROLYTIC 0.47 UF 50V	1.00
44-AL103-K	26-A10103-KB1	CAP. CERAMIC (DISC TYPE)	1.00
42-FC240-K	25-FC0240-K11	CAP. ELECTROLYTIC 24 UF 16V	1.00
46-RL333-J	27-RG0333-J01	CAP. POLYPROPYLENE 0.033 UF	1.00
42-BF221-Y	25-BF0221-U11	CAP. ELECTROLYTIC 220 MFD 50V	1.00
42-BF479-Y	25-BF0479-U11	CAP. ELECTROLYTIC 4.7 MFD 160V	1.00
49-BE229-K	25-BE0229-K31	CAP. TANTALUM 2.2 MFD 35V	1.00
44-AL332-M	26-A10332-MB1	CAP. CERAMIC 3300 PF 500V	1.00
42-BF100-Y	25-BF0100-U11	CAP. ELECTROLYTIC 10 MFD 50V	1.00
44-AL221-K	26-A10221-KB1	CAP. CERAMIC 220PF 500V	1.00
44-AF109-C	26-AB0109-CZ1	CAP. CERAMIC 1 PF 50V +/-0.25%	1.00
42-BF109-Y	25-BF0109-U11	CAP. ELECTROLYTIC 1 UF 50V	1.00
42-BF109-Y	25-BF0109-U11	CAP. ELECTROLYTIC 1 UF 50V	1.00
42-BF479-Y	25-BF0479-U11	CAP. ELECTROLYTIC 4.7 MFD 50V	1.00
44-AF180-J	26-AB0180-JZ1	CAP. CERAMIC 18 PF 50V +/-5%	1.00
44-AF561-K	26-AB0561-KZ1	CAP. CERAMIC (DISC TYPE)	1.00
44-AF300-J	26-AB0300-JZ1	CAP. CERAMIC 30 PF 50V +/-5%	1.00
44-AF301-K	26-AB0301-KZ1	CAP. CERAMIC 300 PF 50V +/-10%	1.00
42-BE220-Y	25-BE0220-U11	CAP. ELECTROLYTIC 22 MFD 35V	1.00
46-PF822-J	27-PBD822-J01	POLYESTER 0.0082 UF 50V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
46-NF223-K	27-NBD223-K01	CAP. POLYESTER (NON-INDUCTIVE)	1.00
46-NF223-K	27-NBD223-K01	CAP. POLYESTER (NON-INDUCTIVE)	1.00
44-AF103-Y	25-BF0331-U11	CAP. ELECTROLYTIC 330 MFD 16V	1.00
42-BF479-Y	25-BF0479-U11	CAP. ELECTROLYTIC 4.7 MFD 50V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
44-AF680-J0	26-AB0680-JC1	CAP. CERAMIC 68 PF 50V +/-5%	1.00
44-AF220-J0	26-AB0220-JC1	CAP. CERAMIC 22 PF 50V +/-5%	1.00
44-AF200-J	26-AB0200-JZ1	CAP. CERAMIC 20 PF 50V +/-5%	1.00
42-BF478-Y	25-BF0478-U11	CAP. ELECTROLYTIC 0.47 UF 50V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
44-AF180-J	26-AB0180-JZ1	CAP. CERAMIC 18 PF 50V +/-5%	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
44-AF121-J3	26-AB0121-JP1	CAP. CERAMIC 120 PF 50V +/-5%	1.00
42-BE220-Y	25-BE0220-U11	CAP. ELECTROLYTIC 22 MFD 35V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
42-BF109-Y	25-BF0109-U11	CAP. ELECTROLYTIC 1 UF 50V	1.00
42-BF109-Y	25-BF0109-U11	CAP. ELECTROLYTIC 1 UF 50V	1.00
44-AF120-J	26-AB0120-JZ1	CAP. CERAMIC 12 PF 50V +/-5%	1.00
42-BC101-Y	25-BC0101-U11	CAP. ELECTROLYTIC 100 MFD 16V	1.00
46-PF473-J	27-PBD473-J01	POLYESTER 0.047 UF 50V	1.00
44-AF181-J	26-AB0181-JZ1	CAP. CERAMIC 180 PF 50V +/-5%	1.00
42-BF479-Y	25-BF0479-U11	CAP. ELECTROLYTIC 4.7 MFD 50V	1.00
46-PF104-J	27-PBD104-J01	POLYESTER 0.1 UF 50V	1.00
44-AF470-J0	26-AB0470-JC1	CAP. CERAMIC 47 PF 50V +/-5%	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
46-PF102-J	27-PBD102-J01	POLYESTER 0.001 UF 50V	1.00
44-AF222-K	26-AB0222-KB1	CAP. CERAMIC 2200 PF 50V	1.00
42-BC470-Y	25-BC0470-U11	CAP. ELECTROLYTIC 47 MFD 16V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
44-AF209-C	26-AB0209-CZ1	CAP. CERAMIC 2 PF 50V +/-0.25%	1.00
46-NF474-J	27-NBD474-J01	CAP. POLYESTER 0.47 UF 50V	1.00
44-AF150-J	26-AB0150-JZ1	CAP. CERAMIC 15 PF 50V +/-5%	1.00
44-AF209-C	26-AB0209-CZ1	CAP. CERAMIC 2 PF 50V +/-0.25%	1.00
44-AF102-Z	26-AB0102-ZF1	CAP. CERAMIC 1N 50V +80-20%	1.00
44-AF102-Z	26-AB0102-ZF1	CAP. CERAMIC 1N 50V +80-20%	1.00
44-AF470-J	26-AB0470-JZ1	CAP. CERAMIC 47 PF 50V +/-5%	1.00
42-BC331-Y	25-BC0331-U11	CAP. ELECTROLYTIC 330 MFD 16V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
42-BE220-Y	25-BE0220-U11	CAP. ELECTROLYTIC 22 MFD 35V	1.00
44-AF102-Z	26-AB0102-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
44-AF102-Z	26-AB0102-ZF1	CAP. CERAMIC 1N 50V +80-20%	1.00
44-AF102-Z	26-AB0102-ZF1	CAP. CERAMIC 1N 50V +80-20%	1.00
42-BF479-Y	25-BF0479-U11	CAP. ELECTROLYTIC 4.7 MFD 50V	1.00
42-BE220-Y	25-BE0220-U11	CAP. ELECTROLYTIC 22 MFD 35V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
82-14157-1	67-141570-0E7	HOLDER - FLYBACK	1.00
82-13129-1	67-131290-0E4	BRACKET - HEAT SINK	1.00
82-13051-3	67-130510-3E4	BRACKET - MAIN BOARD	1.00
82-13050-1	67-130500-0T0	SHIELD CAN - I.F.	1.00
82-10918-4	*****	HEAT SINK	2.00
74-11383-2	46-11383H-01B	POLE HOUSING*1 SIP-LV VIOLET	1.00
71-14182-1	63-P35080-0B4	SCREW TR 3.5 X 8 (B)	4.00
71-13169-1	63-P40120-0B4	SCREW TR 4 X 12	1.00
71-13016	64-P30120-102	SCREW MR 3 X 12	2.00
71-12860	64-B30060-102	SCREW SMB 3 X 6	2.00
71-12860	64-B30060-102	SCREW SMB 3 X 6	2.00
71-12350	65-E33055-07E	METAL SPRING WASHER 3.3 X 5.5	2.00
71-11064	65-Z35060-26E	NUT M 3.5	1.00
71-10998	65-A40090-06E	WASHER - 4 X 9	1.00
71-10998	65-A40090-06E	WASHER - 4 X 9	2.00
71-10997-A	63-P35100-0B4	SCREW TR 3.5 X 10	2.00
71-10991	64-P35080-104	SCREW MR 3.5 X 8	1.00
71-10493	65-Z30050-23E	SCREW NUT M3	2.00
40-20176-10AA	40-201761-0AA	PCB - MAIN BOARD + CRT BOARD	1.00
20-13666-3	41-BF0090-3BB	SOLID WIRE #24 UL 1007 90MM	1.00
20-13615-0	41-BF0180-0BD	SOLID WIRE #24 UL 1007 180MM	1.00
20-13610-9	41-BF0280-9BB	SOLID WIRE #24 UL 1007 280MM	1.00
20-13605-1	62-136050-00F	WIRE CLAMPER	1.00
20-13579-7	41-BF0280-7BB	WIRE #24 UL 1007 280MM 5.5	1.00
20-13553-1	41-BF0540-1BB	SOLID WIRE #24 UL 1007 540MM	1.00
20-13171-5	41-BC0400-5EB	WIRE #18 UL 1007 GREEN	1.00
20-13163-0	41-BF0065-0BB	SOLID WIRE #24 UL 1007 BLACK	1.00
20-13162-1	41-DE0260-1BB	WIRE #22 UL 1015 BROWN	1.00
20-13161-3	41-DE0065-3BB	WIRE #22 UL 1015 ORANGE	1.00
20-13161-3	41-DE0065-3BB	WIRE #22 UL 1015 ORANGE	1.00
20-13005-2	41-BF0170-2BB	AWG 24 UL 1007 170MM RED 5/5	1.00
20-12691-5	41-BC0340-5BB	AWG 18 UL 1007 340MM GREEN	1.00
20-12671-2	41-BF0060-2BB	AWG 24 UL 1007 (T/C) 60MM RED	1.00
20-12326-4	41-BF0200-4BB	AWG 24 UL 1007 200MM YELLOW	1.00
20-12300-4	41-BF0370-4BB	AWG 24 UL 1007 370MM YELLOW	1.00
20-12299-5	41-BF0370-5BB	AWG 24 UL 1007 370MM GREEN	1.00
20-11984-2	41-BF0400-2BB	AWG 24 UL 1007 400MM RED	1.00
20-11984-2	41-BF0400-2BB	AWG 24 UL 1007 400MM RED	1.00
20-11981-6	41-BF0400-6BB	AWG 24 UL 1007 400MM BLUE	1.00
20-11980-0	41-BF0400-0BB	AWG 24 UL 1007 400MM BLACK	1.00
20-11409-7	41-BF0380-7BB	AWG 24 UL 1007 380MM VIOLET	1.00
20-11409-2	41-BF0090-2BB	AWG 24 UL 1007 (T/C) 90MM RED	1.00
20-11047-8	41-BF0110-8BB	SOLID WIRE #24 UL 1007 GREY	1.00
20-11043-3	41-BF0160-3BB	AWG 24 UL 1007 (T/C) 160MM	1.00
20-10654-2	62-106540-00F	LNNE 2.5 X 95 MM	30.00
20-10168-1	41-AE3000-855	TINNED COPPER WIRE	1.00
11-11273-1	62-112730-0AA	COVER - TRANSISTOR	1.00

Location No.	Part No.	Description	Quantity
08-20180-0003	08-201800-003	ASSEMBLY - SELECTOR BOARD	1.00
X001	45-20054-0200	45-200540-200 CERAMIC RESONATOR CSA-400MS/	1.00
VR204	20-20055-2103	20-200552-103 ROTARY POTENTIOMETER - 810K	1.00
T1001	36-20177-0000	36-201770-000 TRANSFORMER - POWER AC240V/	1.00
S801	48-20173-0000	48-201730-000 SWITCH - PUSH POWER ON/OFF W/	1.00
S009	34-13332-1	48-133320-000 SLIDE SWITCH SS12F44GB	1.00
S005	34-13331-1	48-133311-000 TACT SWITCH EVQ-053-07K,	1.00
S004	34-13331-1	48-133311-000 TACT SWITCH EVQ-053-07K,	1.00
S003	34-13331-1	48-133311-000 TACT SWITCH EVQ-053-07K,	1.00
S002	34-13331-1	48-133311-000 TACT SWITCH EVQ-053-07K,	1.00
S001	34-13331-1	48-133311-000 TACT SWITCH EVQ-053-07K,	1.00
R650	36-CD0820-J	18-CD0820-J01 RES. CARBON FILM 82 OHM 1/4W	1.00
R1018	36-CD473-J	18-CD0473-J01 RES. CARBON FILM 47K OHM 1/4W	1.00
R1017	36-CD473-J	18-CD0473-J01 RES. CARBON FILM 47K OHM 1/4W	1.00
R1016	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM	1.00
R1015	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM	1.00
R1014	36-CD473-J	18-CD0473-J01 RES. CARBON FILM 47K OHM 1/16W	1.00
R1013	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM 1/4W	1.00
R1012	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM	1.00
R1011	36-CD223-J	18-CD0223-J01 RES. CARBON FILM 22K OHM 1/16W	1.00
R1010	36-CD223-J	18-CD0223-J01 RES. CARBON FILM 22K OHM 1/16W	1.00
R1009	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM 1/4W	1.00
R1008	36-CD152-J	18-CD0152-J01 RES. CARBON FILM 1.5K OHM	1.00
R1007	36-CD562-J	18-CD0562-J01 RES. CARBON FILM 5.6K OHM	1.00
R1006	18-CD020-1JB1	18-CD0201-J01 RES. CARBON FILM 200 OHM 1/16W	1.00
R1005	36-CD561-J	18-CD0561-J01 RES. CARBON FILM 560 OHM 1/4W	1.00
R1004	36-CD229-J	18-CD0229-J01 RES. CARBON FILM 2.2 OHM 1/4W	1.00
R1003	36-CD229-J	18-CD0229-J01 RES. CARBON FILM 2.2 OHM 1/4W	1.00
R1002	36-CD224-J	18-CD0224-J01 RES. CARBON FILM 220K OHM 1/4W	1.00
R1001	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM 1/4W	1.00
R089	36-CD882-J	18-CD0882-J01 RES. CARBON FILM 8.8K OHM	1.00
R088	36-CD122-J	18-CD0122-J01 RES. CARBON FILM 1.2K OHM	1.00
R079	36-CD102-J	18-CD0102-J01 RES. CARBON FILM 1K OHM 1/16W	1.00
R078	36-CD102-J	18-CD0102-J01 RES. CARBON FILM 1K OHM 1/16W	1.00
R077	18-CD082-2JB1	18-CD0822-J01 RES. CARBON FILM 8.2K OHM	1.00
R076	18-CD068-1JB1	18-CD0681-J01 RES. CARBON FILM 680 OHM 1/16W	1.00
R073	36-CD183-J	18-CD0183-J01 RES. CARBON FILM 18K OHM 1/4W	1.00
R072	18-CD082-2JB1	18-CD0822-J01 RES. CARBON FILM 8.2K OHM	1.00
R068	36-CD123-J	18-CD0123-J01 RES. CARBON FILM 12K	1.00
R067	36-CD123-J	18-CD0123-J01 RES. CARBON FILM 12K	1.00
R066	36-CD223-J	18-CD0223-J01 RES. CARBON FILM 22K OHM 1/16W	1.00
R065	36-CD223-J	18-CD0223-J01 RES. CARBON FILM 22K OHM 1/4W	1.00
R064	18-CD082-2JB1	18-CD0822-J01 RES. CARBON FILM 8.2K OHM	1.00
R063	36-CD822-J	18-CD0822-J01 RES. CARBON FILM 8.2K OHM 1/4W	1.00
R037	36-CD333-J	18-CD0333-J01 RES. CARBON FILM 33K OHM 1/16W	1.00
R036	36-CD333-J	18-CD0333-J01 RES. CARBON FILM 33K OHM 1/16W	1.00
R035	36-CD333-J	18-CD0333-J01 RES. CARBON FILM 33K OHM 1/16W	1.00
R034	36-CD333-J	18-CD0333-J01 RES. CARBON FILM 33K OHM 1/16W	1.00
R033	36-CD333-J	18-CD0333-J01 RES. CARBON FILM 33K OHM 1/16W	1.00
R032	36-CD333-J	18-CD0333-J01 RES. CARBON FILM 33K OHM 1/16W	1.00
R031	36-CD333-J	18-CD0333-J01 RES. CARBON FILM 33K OHM 1/16W	1.00
R029	18-CD015-3JB1	18-CD0153-J01 RES. CARBON FILM 15K OHM 1/16W	1.00
R028	18-CD010-3JB1	18-CD0103-J01 RES. CARBON FILM 10K OHM 1/16W	1.00
R026	36-FE472-J	18-FE0472-J01 RES. METAL OXIDE 4.7K OHM 1/2W	1.00
R025	18-CD082-2JB1	18-CD0822-J01 RES. CARBON FILM 8.2K OHM	1.00
R024	36-CD471-J	18-CD0471-J01 RES. CARBON FILM 470 OHM 1/4W	1.00
R023	18-CD047-1JB1	18-CD0471-J01 RES. CARBON FILM 470 OHM 1/16W	1.00
R022	18-CD010-3JB1	18-CD0103-J01 RES. CARBON FILM 10K OHM 1/16W	1.00
R021	18-CD010-5JB1	18-CD0105-J01 RES. CARBON FILM 10K OHM 1/16W	1.00
R019	36-CD224-J	18-CD0224-J01 RES. CARBON FILM 220K OHM 1/4W	1.00
R017	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM 1/4W	1.00
R016	36-CD224-J	18-CD0224-J01 RES. CARBON FILM 220K OHM 1/4W	1.00
R015	18-CD018-4JB1	18-CD0184-J01 RES. CARBON FILM 180K 1/16W	1.00
R014	36-CD104-J	18-CD0104-J01 RES. CARBON FILM 100K OHM	1.00
R010	36-CE391-J	18-CE0391-J01 RES. CARBON FILM 390 OHM 1/2W	1.00
R006	18-CD015-3JB1	18-CD0153-J01 RES. CARBON FILM 15K OHM 1/16W	1.00
R005	18-CD082-2JB1	18-CD0822-J01 RES. CARBON FILM 8.2K OHM	1.00
R003	36-CD103-J	18-CD0103-J01 RES. CARBON FILM 10K OHM 1/4W	1.00
R002	36-CD101-J	18-CD0101-J01 RES. CARBON FILM 100 OHM 1/4W	1.00
R001	36-CE391-J	18-CE0391-J01 RES. CARBON FILM 390 OHM 1/2W	1.00
I1004	14-10001-0	11-08C338-001 TRANSISTOR BC 338	1.00
I1003	14-10012-1	11-08C328-001 TRANSISTOR BC 328	1.00
I1002	14-10001-0	11-08C338-001 TRANSISTOR BC 338	1.00
I1001	14-10001-0	11-08C338-001 TRANSISTOR BC 338	1.00
I009	14-12148-1	11-2N3904-001 TRANSISTOR 2N3904	1.00
I007	14-12148-1	11-2N3904-001 TRANSISTOR 2N3904	1.00
I005	14-10717-Y	11-SA1015-OY1 TRANSISTOR 2SA 1015-Y	1.00
I004	14-10717-Y	11-SA1015-OY1 TRANSISTOR 2SA 1015-Y	1.00
I002	14-10001-0	11-08C338-001 TRANSISTOR BC 338	1.00
I001	14-10717-Y	11-SA1015-OY1 TRANSISTOR 2SA 1015-Y	1.00
651	46-20192-W02C	46-20192W-02C PIN BASE - 2 POLE WPF9102	1.00
650	73-13191-9	47-1319190-000 PHONE JACK - HSJ0922-01-1150	1.00
LED 1001	14-12718-2DR2	14-127182-DR2 LED - LED DISPLAY CLOCK 24HR	1.00
C1001	14-12717-1	13-MS3450-NLP I.C. - TMS-3450NL	1.00
C003	13-MS045-301P	13-MS0453-01P I.C. - MS0453-012P	1.00
C002	13-OMS86-55FP	13-OMS865-SFP I.C. - MS8655FP	1.00
C001	13-MS043-110P	13-MS0431-10P I.C. - MS0431-100SP	1.00
I012	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
I011	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
I010	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
I009	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
I008	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
I007	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
I006	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
I005	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
I004	14-10181-1	10-1N4001-E21 DIODE IN 4001	1.00
I003	14-10181-1	10-1N4001-E21 DIODE IN 4001	1.00
I002	14-12754-1	10-79C10V-D21 DIODE 8ZX79C 10V	1.00
I001	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
073	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
064	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
048	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
043	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
042	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
040	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
039	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
038	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
026	14-10029-1	10-ZTK33C-021 DIODE - ZENER ZTK33C	1.00
021	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
010	14-10273-1	10-1N4148-A21 DIODE 1N4148 (SWITCHING)	1.00
008	14-12060-1	10-WL005M-E21 DIODE WL 005M (BRIDGE RECT.)	1.00
007	14-10181-1	10-1N4001-E21 DIODE IN 4001	1.00
004	10-0HZ52C-2D21	10-0HZ52C-021 DIODE - ZENER 5.0V±5.2V 5%	1.00
003	10-0HZ54A-1D21	10-0HZ54A-021 DIODE - ZENER 4.3V±4.3V 5%	1.00
010	42-BF479-Y	25-BF0479-U11 CAP. ELECTROLYTIC 4.7 MF 50V	1.00
009	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	1.00
008	42-BF109-Y	25-BF0109-U11 CAP. ELECTROLYTIC 1 UF 50V	1.00



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Location No.	Part No.	Description	Quantity	
C1007	44-AF473-Z	26-AB0473-ZF1	CAP. CERAMIC 0.047 UF 50V	1.00
C1006	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C1005	42-BC470-Y	25-BC0470-U11	CAP. ELECTROLYTIC 47 MFD 16V	1.00
C1004	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C1003	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C1002	42-BC332-U	25-BC0332-U11	CAP. ELECTROLYTIC 3300 UF 16V	1.00
C1001	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C095	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C092	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C091	42-BF109-Y	25-BF0109-U11	CAP. ELECTROLYTIC 1 UF 50V	1.00
C090	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C088	44-AF330-J	26-AB0330-J21	CAP. CERAMIC 33 PF 50V +/-5%	1.00
C087	42-BF220-Y	25-BF0220-U11	CAP. ELECTROLYTIC 22 MFD 50V	1.00
C085	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C079	42-BF470-Y	25-BF0470-U11	CAP. ELECTROLYTIC 47 MFD 50V	1.00
C078	44-AF470-J	26-AB0470-J21	CAP. CERAMIC 47 PF 50V +/-5%	1.00
C076	44-AF330-J	26-AB0330-J21	CAP. CERAMIC 33 PF 50V +/-5%	1.00
C075	44-AF221-J	26-AB0221-J21	CAP. CERAMIC 22 PF 50V +/-5%	1.00
C074	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C073	44-AF222-K	26-AB0222-KB1	CAP. CERAMIC 2200 PF 50V	1.00
C072	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C071	44-AF151-J	26-AB0151-JC1	CAP. CERAMIC 150PF 50V	1.00
C067	44-AF101-J	26-AB0101-J21	CAP. CERAMIC 100 PF 50V +/-5%	1.00
C065	44-AF101-J	26-AB0101-J21	CAP. CERAMIC 100 PF 50V +/-5%	1.00
C063	44-AF101-J	26-AB0101-J21	CAP. CERAMIC 100 PF 50V +/-5%	1.00
C029	49-BE228-K	25-BE0228-K31	CAP. TANTALUM 0.22UF +/-10%	1.00
C028	49-BE478-M	25-BE0478-M31	CAP. TANTALUM 0.47 UF 35V	1.00
C027	44-AF221-J	26-AB0221-J21	CAP. CERAMIC 220 PF 50V +/-5%	1.00
C026	44-AF203-Z	26-AB0203-ZF1	CAP. CERAMIC 20N 50V +80-20%	1.00
C023	44-AF220-J	26-AB0220-J21	CAP. CERAMIC 22 PF 50V +/-5%	1.00
C022	44-AF680-J	26-AB0680-J21	CAP. CERAMIC 68 PF 50V +/-5%	1.00
C021	44-AF680-J	26-AB0680-J21	CAP. CERAMIC 68 PF 50V +/-5%	1.00
C014	42-BF478-Y	25-BF0478-U11	CAP. ELECTROLYTIC 0.47 UF 50V	1.00
C013	44-AF300-J	26-AB0300-J21	CAP. CERAMIC 30 PF 50V +/-5%	1.00
C012	44-AF300-J	26-AB0300-J21	CAP. CERAMIC 30 PF 50V +/-5%	1.00
C011	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C010	42-BC101-Y	25-BC0101-U11	CAP. ELECTROLYTIC 100 MFD 16V	1.00
C009	42-BC470-Y	25-BC0470-U11	CAP. ELECTROLYTIC 47 MFD 16V	1.00
C005	42-BB102-Y	25-BB0102-U11	CAP. ELECTROLYTIC 1000 MFD 10V	1.00
C003	44-AF103-Z	26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
C002	42-BC101-Y	25-BC0101-U11	CAP. ELECTROLYTIC 100 MFD 16V	1.00
C001	42-BD101-Y	25-BD0101-U11	CAP. ELEC. 100 UF 25V +50-20%	1.00
	86-12837-1	54-128370-000	FIBRE TUBE - 2MM X 15MM	4.00
	83-11397-4	54-113974-000	PVC TUBE AWG# L=10MM	2.00
	83-11397-4	54-113974-000	PVC TUBE AWG# L=10MM	4.00
	82-13393-1	67-133930-0E4	BRACKET - TRANSFORMER MOUNTING	1.00
	81-13510-8	*****	INLAY - FRONT CONTROL (HR.MIN.	1.00
	74-14147-6M	46-14147H-03C	HOUSING - POLE 3 #24 UL 1007	1.00
	74-13902-6	46-13902H-02C	HOUSING - POLE 2 #24 WA3202	1.00
	74-13796-6	46-13796H-02C	HOUSING - POLE 2 #24 UL1007	1.00
	74-13719-6	46-13719H-02C	HOUSING-POLE 2 WA3202 #26 1185	1.00
	74-13709-6	46-13709H-04C	HOUSING-POLE 4 WA3204 #24	1.00
	74-13522-6	46-13522H-06C	POLE HOUSING#6 WA3206 #24	1.00
	74-12847-6	46-12847H-03C	POLE HOUSING#3 #22 UL 1015	1.00
	74-11308-9	46-11308H-03C	HOUSING - POLE 3 WA3203 #24	1.00
	71-13966-1	66-139660-0E0	METAL WASHER 10 X 18MM 1041	1.00
	71-13778	64-F30240-102	MR 3 X 24 (FLAT HEAD)	2.00
	71-13437	65-A33070-05E	METAL WASHER 3.3 X 7	1.00
	71-12860	64-B30060-102	SCREW SMB 3 X 6	2.00
	71-11898	63-P26080-BT4	SCREW TR 2.6 X 8	2.00
	71-11117	63-P26060-BT4	TR 2.6 X 6 (BT)	5.00
	71-10493-1	65-Z30050-23E	NUT M3	3.00
	71-10114-A	63-P30100-AB2	SCREW TR 3 X 10	1.00
	71-10114-A	63-P30100-AB2	SCREW TR 3 X 10	1.00
	71-10114-A	63-P30100-AB2	SCREW TR 3 X 10	1.00
	63-B3006-00B4	63-B30060-084	SCREW S/T 3 X 6 (B)	2.00
	55-20102-P00A	55-20102F-00A	PANEL - TUNING	1.00
	49-20101-0000	49-201010-000	CONDUCTIVE RUBBER	1.00
	46-20191-S091	46-20191S-091	PINS CONNECTOR - 9 PINS	0.50
	46-20190-S041	46-20190S-041	PINS CONNECTOR - 4 PINS	0.50
	46-20189-H02C	46-20189H-02C	HOUSING - POLE 2 #24 UL 1007	1.00
	46-20188-H02C	46-20188H-02C	HOUSING - POLE 2 #24 UL 1007	1.00
	46-20185-H04C	46-20185H-04C	HOUSING - POLE 4 #24 UL 1007	1.00
	46-20172-S301	46-20172S-301	PINS CONN. - 30P-2.5MM PLASTIC	1.00
	40-20178-10AA	40-201781-0AA	PCB - PHONE JACK	1.00
	40-20175-10AA	40-201751-0AA	PCB - SELECTOR BOARD	1.00
	33-13971-3	33-139713-0F2	PCB - KEY BOARD	1.00
	20-14149-6	41-EE0420-6CC	WIRE #22 UL 1015 420MM/7MM	1.00
	20-13782-1	41-DE0420-1CC	WIRE #22 UL 1015 420MM 7.7	1.00
	20-13782-1	41-DE0420-1CC	WIRE #22 UL 1015 420MM 7.7	1.00
	20-13614-0	41-BF0120-0BD	SOLID WIRE #24 UL 1007 120MM	1.00
	20-13584-5	41-BF0140-5BB	WIRE #24 UL 1007 140MM 5.5	1.00
	20-13583-4	41-BF0110-4BB	WIRE #24 UL 1007 110MM 5.5	1.00
	20-13557-7	41-BF0160-7BB	SOLID WIRE #24 UL 1007 160MM	1.00
	20-12329-0	41-BF0080-0BB	AWG 24 UL 1007 80MM BLACK	1.00
	20-12325-2	41-BF0130-2BB	AWG 24 UL 1007 130MM RED	1.00
	20-11357-5	41-BF0120-5BB	AWG 24 UL 1007 (T/C) 120MM	1.00
	20-11047-8	41-BF0110-8BB	SOLID WIRE #24 UL 1007 GREY	1.00
	20-11043-3	41-BF0160-3BB	AWG 24 UL 1007 (T/C) 160MM	1.00
	11-13751-1	56-137510-0HA	PUSH BUTTON	1.00
	11-13619-1	62-136190-0HA	SPACER - SLIDE SWITCH	1.00
	11-13524-1	56-135240-0HA	PUSH BUTTON 6X6MM - CONTROL	12.00
	11-13502-1	55-135020-0HA	PANEL - CONTROL	1.00
	11-13286-1	56-132860-0HA	PUSH BUTTON - POWER (A)	1.00
	08-20181-0003	08-201810-003	ASSEMBLY - FRONT CABINET	1.00
	TVAL CABINET		ASSEMBLY - P/CAB W/O GLASS	
	13-13259-2	42-132592-000	SPEAKER 3 1/2" 16 OHM 1.5W	1.00
	83-13451-1	57-134510-000	RUBBER PAD - 5X10X2	4.00
	82-13394-2	67-13394P-2A0	LOCK (ALUM.) - FRONT GLASS	2.00
	82-11001-1	67-110010-0E0	SPRING - CRT 6X18X0.5	1.00
	82-10554-1	66-105540-0E1	CLAMP - SPEAKER	2.00
	81-13461-1	50-13461S-004	LOGO	1.00
	81-13272-1	47-132721-000	FRONT GLASS	1.00
	74-13902-6	46-13902H-02C	HOUSING - POLE 2 #24 WA3202	1.00
	71-20238-00E2	7-202380-0E2	LABEL - STATIC FOR CLOCK	1.00
	71-13437	65-A33070-05E	METAL WASHER 3.3 X 7	1.00
	71-13435	63-P30140-AB4	SCREW TR 3 X 14	1.00
	71-12688	63-P30180-AB2	SCREW TR 3 X 18	1.00
	71-12688	63-P30180-AB2	SCREW TR 3 X 18	2.00
	71-11899	63-P40350-AB4	SCREW TR 4 X 35	4.00
	71-10998	65-A40090-06E	WASHER - 4 X 9	1.00
	71-10993	67-A45220-15E	WASHER - 4.5 X 22	4.00
	71-10989-A	63-P35120-AB4	SCREW TR 3.5 X 12	2.00
	71-10496-A	63-P30080-AB2	SCREW TR 3 X 8	2.00
	70-20228-00EB	70-202280-0EB	POINT OF SALE	1.00
	63-B3015-00B4	63-B30150-0B4	SCREW TR 3 X 15 (B)	1.00
	63-B3008-00B4	63-B30080-0B4	SCREW TR 3 X 8 (B)	2.00
	58-20139-S001	5H-20139S-001	LENS - DOOR	1.00

Part No.	Description	Quantity
26-AB0473-ZF1	CAP. CERAMIC 0.047 UF 50V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
25-BC0470-U11	CAP. ELECTROLYTIC 47 MFD 16V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
25-BC0332-U11	CAP. ELECTROLYTIC 3300 UF 16V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
25-BF0109-U11	CAP. ELECTROLYTIC 1 UF 50V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
26-AB0330-J21	CAP. CERAMIC 33 PF 50V +/-5%	1.00
25-BF0220-U11	CAP. ELECTROLYTIC 22 MFD 50V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
25-BF0470-U11	CAP. ELECTROLYTIC 47 MFD 50V	1.00
26-AB0470-J21	CAP. CERAMIC 47 PF 50V +/-5%	1.00
26-AB0330-J21	CAP. CERAMIC 33 PF 50V +/-5%	1.00
26-AB0221-J21	CAP. CERAMIC 22 PF 50V +/-5%	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
26-AB0222-KB1	CAP. CERAMIC 2200 PF 50V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
26-AB0151-JC1	CAP. CERAMIC 150PF 50V	1.00
26-AB0101-J21	CAP. CERAMIC 100 PF 50V +/-5%	1.00
26-AB0101-J21	CAP. CERAMIC 100 PF 50V +/-5%	1.00
26-AB0101-J21	CAP. CERAMIC 100 PF 50V +/-5%	1.00
25-BE0228-K31	CAP. TANTALUM 0.22UF +/-10%	1.00
25-BE0478-M31	CAP. TANTALUM 0.47 UF 35V	1.00
26-AB0221-J21	CAP. CERAMIC 220 PF 50V +/-5%	1.00
26-AB0203-ZF1	CAP. CERAMIC 20N 50V +/-20%	1.00
26-AB0220-J21	CAP. CERAMIC 22 PF 50V +/-5%	1.00
26-AB0680-J21	CAP. CERAMIC 68 PF 50V +/-5%	1.00
26-AB0680-J21	CAP. CERAMIC 68 PF 50V +/-5%	1.00
25-BF0478-U11	CAP. ELECTROLYTIC 0.47 UF 50V	1.00
26-AB0300-J21	CAP. CERAMIC 30 PF 50V +/-5%	1.00
26-AB0300-J21	CAP. CERAMIC 30 PF 50V +/-5%	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
25-BC0101-U11	CAP. ELECTROLYTIC 100 MFD 16V	1.00
25-BC0470-U11	CAP. ELECTROLYTIC 47 MFD 16V	1.00
25-BB0102-U11	CAP. ELECTROLYTIC 1000 MFD 10V	1.00
26-AB0103-ZF1	CAP. CERAMIC 0.01 UF 50V	1.00
25-BC0101-U11	CAP. ELECTROLYTIC 100 MFD 16V	1.00
25-BB0101-U11	CAP. ELEC. 100 UF 25V +/-20%	1.00
54-128370-000	FIBRE TUBE - 2MM X 15MM	4.00
54-113974-000	PVC TUBE AWG#6 L=10MM	2.00
54-113974-000	PVC TUBE AWG#6 L=10MM	4.00
67-133930-0E4	BRACKET - TRANSFORMER MOUNTING	1.00
*****	INLAY - FRONT CONTROL (HR, MIN.)	1.00
46-14147H-03C	HOUSING - POLE 3 #24 UL 1015	1.00
46-13902H-02C	HOUSING - POLE 2 #24 WA3202	1.00
46-13796H-02C	HOUSING - POLE 2 #24 UL1007	1.00
46-13719H-02C	HOUSING-POLE 2 WA3202 #26 1185	1.00
46-13709H-04C	HOUSING-POLE 4 WA3204 #24	1.00
46-13522H-06C	POLE HOUSING#6 WA3206 #24	1.00
46-12847H-03C	POLE HOUSING#3 #22 UL 1015	1.00
46-11308H-03C	HOUSING - POLE 3 WA3203 #24	1.00
66-139660-0E0	METAL WASHER 10 X 18MM 1041	1.00
64-F30240-102	MR 3 X 24 (FLAT HEAD)	2.00
65-A33070-05E	METAL WASHER 3.3 X 7	1.00
64-B30060-102	SCREW SMB 3 X 6	2.00
63-P26080-BT4	SCREW TR 2.6 X 8	2.00
63-P26060-BT4	TR 2.6 X 6 (BT)	5.00
65-Z30050-23E	NUT M3	2.00
63-P30100-AB2	SCREW TR 3 X 10	3.00
63-P30100-AB2	SCREW TR 3 X 10	1.00
63-P30100-AB2	SCREW TR 3 X 10	2.00
63-B30060-084	SCREW - S/T 3 X 6 (B)	2.00
55-20102P-00A	PANEL - TUNING	1.00
49-201010-000	CONDUCTIVE RUBBER	1.00
46-201915-091	PINS CONNECTOR - 9 PINS	0.50
46-201905-041	PINS CONNECTOR - 4 PINS	0.50
46-20189H-02C	HOUSING - POLE 2 #24 UL 1007	1.00
46-20188H-02C	HOUSING - POLE 2 #24 UL 1007	1.00
46-20185H-04C	HOUSING - POLE 4 #24 UL 1007	1.00
46-201725-301	PINS CONN. - 30P=2.5MM PLASTIC	1.00
40-201781-0AA	PCB - PHONE JACK	1.00
40-201751-0AA	PCB - SELECTOR BOARD	1.00
37-139713-0F2	PCB - KEY BOARD	1.00
41-EE0420-6CC	WIRE #22 UL 1015 420MM/7MM	1.00
41-DE0420-1CC	WIRE #22 UL 1015 420MM 7.7	1.00
41-DE0420-1CC	WIRE #22 UL 1015 420MM 7.7	1.00
41-BF0120-0BD	SOLID WIRE #24 UL 1007 120MM	1.00
41-BF0140-5BB	WIRE #24 UL 1007 140MM 5.5	1.00
41-BF0110-4BB	WIRE #24 UL 1007 110MM 5.5	1.00
41-BF0160-7BB	SOLID WIRE #24 UL 1007 160MM	1.00
41-BF0080-0BB	AWG 24 UL 1007 80MM BLACK	1.00
41-BF0130-2BB	AWG 24 UL 1007 130MM RED	1.00
41-BF0120-5BB	AWG 24 UL 1007 (T/C) 120MM	1.00
41-BF0110-8BB	SOLID WIRE #24 UL 1007 GREY	1.00
41-BF0160-3BB	AWG 24 UL 1007 (T/C) 160MM	1.00
50-137510-0HA	PUSH BUTTON	1.00
62-136190-0HA	SPACER - SLIDE SWITCH	1.00
50-135240-0HA	PUSH BUTTON 6X6MM - CONTROL	12.00
55-135020-0HA	PANEL - CONTROL	1.00
54-132860-0HA	PUSH BUTTON - POWER (A)	1.00
08-201810-003	ASSEMBLY - FRONT CABINET	1.00
42-132592-000	SPEAKER 3 1/2" 16 OHM 1.5W	1.00
59-134510-000	RUBBER PAD - 5x10x2	4.00
67-13394P-2A0	LOCK (ALUM.) - FRONT GLASS	2.00
67-110010-0E0	SPRING - CRT 6X18X0.5	1.00
6A-105540-0E4	CLAMP - SPEAKER	2.00
5H-13461S-001	LOGO	1.00
4H-132721-000	FRONT GLASS	1.00
4H-13902H-02C	HOUSING - POLE 2 #24 WA3202	1.00
7-202380-0E2	LABEL - STATIC FOR CLOCK	1.00
65-A33070-05E	METAL WASHER 3.3 X 7	1.00
63-P30140-AB4	SCREW TR 3 X 14	1.00
63-P30180-AB2	SCREW TR 3 X 18	3.00
63-P30180-AB2	SCREW TR 3 X 18	2.00
63-P40350-AB4	SCREW TR 4 X 35	4.00
65-A40090-06E	WASHER - 4 X 9	1.00
65-A45220-15E	WASHER - 4.5 X 22	4.00
63-P35120-AB4	SCREW TR 3.5 X 12	2.00
63-P30080-AB2	SCREW TR 3 X 8	2.00
7H-202280-BE8	POINT OF SALE	1.00
63-B30150-0B4	SCREW TR 3 X 15 (B)	3.00
63-B30080-0B4	SCREW TR 3 X 8 (B)	2.00
5H-20139S-001	LENS - DOOR	1.00

Location No.	Part No.	Description	Quantity	
58-20138-S001	58-20138S-001	LENS - TUNING PANEL	1.00	
55-20103-P00A	55-20103P-00A	DOOR - FRONT	1.00	
54-20220-00U0	54-202200-00U	SPONGE CUSHION-SPK PROTECTIVE	1.00	
51-10781-1	56-107810-000	COIL - DEGAUSSING (14")	1.00	
20-10155-1	49-101551-000	BRAIDED FLAT WIRE (1.100MM)	1.00	
15-13632-1	44-136320-000	CRT - COLOR 14"	1.00	
11-13270-1	62-132700-0HA	LOCK (UPPER R) - FRONT GLASS	1.00	
11-13269-1	62-132690-0HA	LOCK (UPPER L) - FRONT GLASS	1.00	
11-13261-1	56-13261P-0HA	GRILLE (R) - SPEAKER	1.00	
11-13260-1	56-13260P-0HA	GRILLE (L) - SPEAKER	1.00	
11-13257-1	62-132570-0HA	HOLDER - PCB	2.00	
11-13083-3	62-130830-3HA	RAIL STAND (R)	1.00	
11-13083-2	62-130830-2HA	RAIL STAND (L)	1.00	
11-13077-2	55-13077P-2HA	CABINET - FRONT 14" SQ	1.00	
11-11897-1	62-118970-1HA	SPACER - CRT MOUNTING	4.00	
11-10903-1	62-109030-0HA	MOUNTING POST	2.00	
11-10073-2	62-100730-2HA	HOLDER - AC POWER CORD	1.00	
05-13450-1	71-134500-0A2	LABEL - WARNING "CAUTION"	1.00	
03-13771-3	08-137710-003	ASSEMBLY - REAR CABINET	1.00	
83-11400-1	54-114000-000	FELT TAPE - 150 x 19MM	4.00	
82-13674-1	67-136740-0E2	PLATE - ANTENNA TERMINAL	2.00	
81-11484-1	67-11484S-0N0	PLATE - MODEL NO.	1.00	
71-10999-A	63-P35140-AB4	SCREW TR 3.5 X 14	4.00	
71-10998	65-A40090-06E	WASHER - 4 X 9	2.00	
51-11110-1	36-111100-000	300:75 OHM MATCH COIL	1.00	
33-13755-1	33-137551-0AA	PCB - ANTENNA MATCHING	1.00	
28-11134-1	47-111340-000	LOOP ANTENNA (14" U.K. CTV)	1.00	
20-11263-0	41-PG0400-0FK	75 OHM COAXIAL CABLE 400MM	1.00	
11-14085-1	62-140850-0HA	BACK COVER	1.00	
11-13078-1	55-130780-1HA	CABINET -REAR 14" SQ	1.00	
11-11379-1	62-113790-0HA	ANTENNA CORD BUSHING	1.00	
03-13768-3	08-137680-003	ASSEMBLY - POWER BOARD	1.00	
T801	57-13278-1A	36-132781-A00	FILTER - AC LINE	1.00
T003	51-12054-2	43-000ULT-1M5	SUBMINIATURE RELAY ULT-1M-5	1.00
R800	36-BE105-K	18-BE0105-JB1	RES. CARBON COMPOSITION	1.00
P803	74-12866-6	46-12866W-02C	POLE PIN BASE#2 WF9002	1.00
F801	30-10722-1	50-02000D-10S	FUSE 2AT 250VAC 5 X 20 MM	1.00
CB00	46-M0224-M	27-MGA224-M01	CAP. METALLIZED POLYESTER	1.00
	83-11397-1	54-113971-000	PVC TUBE (PRICE/FT.) #6 L=20MM	2.00
	74-10968-2	46-109680-0E2	WRAPPING POST 1.2X17 POWER PCB	4.00
	71-10167-1	66-101670-0E2	HOLDER - FUSE	2.00
	33-13429-1	33-134291-0AA	P.C.B. - POWER	1.00
	20-11260-1	51-CC0219-0CA	AC POWER CORD (BS 6500)	1.00
	11-12949-1	62-129490-0HF	SPACER SUPORT - NYLON	3.00
	05-11390-1	71-113900-0A2	POWER CORD LABEL (95 X 43)MM	1.00
08-20182-0003	08-201820-003	ASSEMBLY - PACKING	1.00	
70-20183-JAE0	70-201833-AE0	OPERATION MANUAL	1.00	
05-13412-1	74-081081-60C	POLYBAG FOR TV SET	1.00	
05-13411-1	75-134111-000	POLYFOAM SET FOR TV SET	1.00	
05-13409-1	76-13409X-02A	CARTON - 14" TV	1.00	
05-11398-1	71-113980-0A0	SERIAL NO. LABEL (PRICE/PC.)	2.00	
08-20166-0003	08-201660-003	ASSEMBLY - I.R. TRANSMITTER	1.00	
X1	27-12055-0	45-120550-200	CERAMIC RESONATOR CSB455E	1.00
R2	36-CD021-J	18-CD0221-JD1	RES. CARBON FILM 220 OHM 1/4W	1.00
R1	36-CD109-J	18-CD0109-JB1	RES. CARBON FILM 1 OHM 1/4W	1.00
Q1	14-10001-0	11-08C338-001	TRANSISTOR BC 338	1.00
IC1	13-M5046-000P	13-M50460-00P	I.C. - M50460-001P	1.00
D2	14-10273-1	10-IN4148-A21	DIODE IN4148 (SWITCHING)	1.00
D1	14-12051-1	15-OTSU54-02D	INFRARED DIODE TSU5402	1.00
C4	44-AF221-J	26-AB0221-J21	CAP. CERAMIC 220 PF 50V +/-5%	1.00
C3	44-AF221-J	26-AB0221-J21	CAP. CERAMIC 220 PF 50V +/-5%	1.00
C2	44-AF102-K	26-AB0102-KB1	CAP. CERAMIC 1000 PF 50V	1.00
C1	49-BB100-K	25-BB0100-K31	CAP. TANTALUM 100UF 10V +/-10%	1.00
	67-20224-00P2	*****	BATTERY CONTACT (+/-)	1.00
	67-20223-00P2	*****	BATTERY TERMINAL (+)	1.00
	67-20222-00P2	*****	BATTERY TERMINAL (+)	1.00
	63-P26100-0AA2	63-P26100-0A2	SCREW - S/T, P 2.6 X 10 (A)	1.00
	58-20090-S201	58-20090S-201	INLAY - REMOTE CONTROL	1.00
	56-20087-00HA	56-200870-0HA	LENS - REMOTE CONTROL	1.00
	55-20088-00HA	55-200880-0HA	DOOR - BATTERY	1.00
	55-20086-00HA	55-200860-0HA	CASE - BOTTOM, REMOTE HANDSET	1.00
	55-20085-00HA	55-200850-0HA	CASE - TOP, REMOTE HANDSET	1.00
	49-20089-0000	49-200890-000	CONDUCTIVE RUBBER - 30 KEY PAD	1.00
	40-20199-10FX	40-201991-0FX	PCB - IR TRANSMITTER	1.00
	20-12198-2	41-010075-2BB	WIRE - BATTERY 75MM/4MM RED	1.00
	20-12198-0	41-010075-0BB	WIRE - BATTERY 75MM/4MM -	1.00
	05-14104-1	74-008020-60C	POLYBAG FOR HANDSET BOX200MM	1.00
08-20167-0000	08-201670-000	ASSEMBLY - I.R. PRE-AMPLIFIER	1.00	
VR1302	20-20126-0203	20-201260-203	TRIMMER 20K OHM B-TYPE	1.00
R1303	36-CB223-J	18-CB0223-JB1	RES. CARBON FILM 22K OHM 1/16W	1.00
R1302	18-CB019-4JB1	18-CB0194-JB1	RES. CARBON FILM 190K 1/16W	1.00
R1301	18-CB047-9JB1	18-CB0479-JB1	RES. CARBON FILM 4.7 OHM 1/16W	1.00
IC1300	13-CX201-06AS	13-CX2010-6AS	I.C. - CX20106A	1.00
D1301	14-12052-1	15-00BPW4-1NE	IR DIODE BPW41N	1.00
C1303	44-AF331-J	26-AB0331-J21	CAP. CERAMIC 330 PF 50V +/-5%	1.00
C1302	25-BF033-9M1B	25-BF0339-M1B	CAP. ELECTROLYTIC 3.3 UF 50V	1.00
C1301	25-BF010-9M1B	25-BF0109-M1B	CAP. ELECTROLYTIC 1 UF 50V	1.00
	67-20052-00T0	67-200520-0T0	SHIELD CAN - IR PRE. AMP.	1.00
	54-20225-00U0	54-202250-0U0	FIBRE SHEET - 15 X 22 X 0.3MM	1.00
	40-20083-10AA	40-200831-0AA	PCB - I.R. PRE-AMPLIFIER	1.00

End of List

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## SERVICE ADJUSTMENTS

### FOCUS ADJUSTMENT

Adjust focus control on the horizontal output transformer (T414) for maximum overall definition and fine detail with brightness and contrast controls set at normal viewing levels.

### DELAY AGC ADJUSTMENT

1. Connect TV channel signal generator to antenna jack.
2. Adjust TV channel signal generator output level to 1.585 mV (64dBu), channel 21.
3. Turn AGC delay control (VR117) on main board to fully clockwise position and set AFT to on position.
4. Turn VR117 counter clockwise slowly until snow noise just disappears on screen.

### HORIZONTAL OSCILLATOR ADJUSTMENT

Turn the horizontal oscillator control (VR907) clockwise and counter clockwise to find the pull in range of the horizontal oscillator. Then turn VR907 to the centre of the pull in range.

### HORIZONTAL CENTERING ADJUSTMENT

At nominal 240V AC line voltage, adjust horizontal centering control (VR242) until there is equal amount of overscanning on left and right side of screen.

### VERTICAL CENTERING ADJUSTMENT

At nominal 240V AC line voltage, adjust vertical centering control (VR315) until there is equal amount of overscanning at top and bottom of screen.

### SUB-BRIGHT ADJUSTMENT

1. Connect test pattern generator (PAL-I signal, 1.585 mV 64 dBu, channel 21) to antenna jack through TV channel signal generator.
2. Set the contrast, brightness and colour controls to minimum.
3. Adjust sub-bright control (VR216) until the whole screen just become completely dark.

### COLOUR SYNC. ADJUSTMENT

1. Connect colour bar pattern generator (PAL-I signal, 1.585 mV 64dBu, channel 21) to antenna jack through TV channel signal generator and allow the TV set warm up for 5 minutes.
2. Connect test point TP-43 to chassis ground with a jumper.
3. Connect a 10K ohm resistor across pin 2 and pin 12 of IC201 so as to turn off colour killer.
4. Adjust colour sync. control (VR227) so that the colour bar pattern stands still or drifts slowly across the picture screen.
5. Remove the 10K ohm resistor and the jumper.

### WHITE BALANCE ADJUSTMENT

1. Connect grey scale pattern generator (PAL-I signal, 1.585 mV 64dBu, channel 21) to antenna jack through TV channel signal generator and allow the TV set warm up for 15 minutes.
2. Set colour control to minimum.
3. Set brightness control to normal viewing level and contrast control to maximum.
4. Set the green drive (VR511), blue drive (VR510), red cut off (VR520), green cut off (VR501) and blue cut off (VR503) controls to center of their rotation ranges.
5. Disconnect the raster terminal on the main board and short terminals (J) and (H) with a jumper.
6. Rotate the screen control on horizontal drive transformer (T414) gradually from fully counter clockwise position clockwise until a dim horizontal line appears on the screen.
7. Rotate VR501 and VR503 until a dim white line is obtained.
8. Remove the jumper and connect back the raster terminal.
9. Set brightness control to maximum.
10. Adjust VR511 and VR510 until a good white balance at the brightest column is obtained.

11. Adjust VR501 and VR503 until a good white balance column is obtained.
12. Repeat steps 10 and 11 until good white balance is obtained at the brightest and the least bright columns.

## GENERAL ALIGNMENT

### TEST EQUIPMENT:

- Video IF sweep/marker generator — capable of generating 39.5MHz.
- Oscilloscope — wide band.
- Power supply — a well filtered DC power supply capable of generating 12V and at least 250 mA of current.
- Sound IF sweep/marker generator — capable of generating 6MHz.

A warm-up period of at least 15 minutes should be allowed for stabilization of equipment such as sweep/marker generator.

### SIGNAL OVERLOAD

Use of excessive signal from the sweep/marker generator can overload the receiver circuits. To determine that this condition is not present, the response curve is true, turn the sweep/marker generator output gradually increase of the sweep output should not cause any distortion of the response except in amplitude. If the configuration, such as flattening at the top or dropping at the bottom, decrease the sweep output to restore the proper response. The oscilloscope gain should be run as high as possible to observe the pattern with the peak-to-peak values specified, thus requiring less output from sweep/marker generator and less chance of overloading the receiver. Markers from the sweep/marker generator should not cause any distortion of the response.

### CAUTION

Remove the AC power plug before making any test equipment connections.

### IF ALIGNMENT

1. Remove IF link cable from tuner.
2. Supply 12V DC to pin 20 of IC101 and bias pin 5 of figure 1.

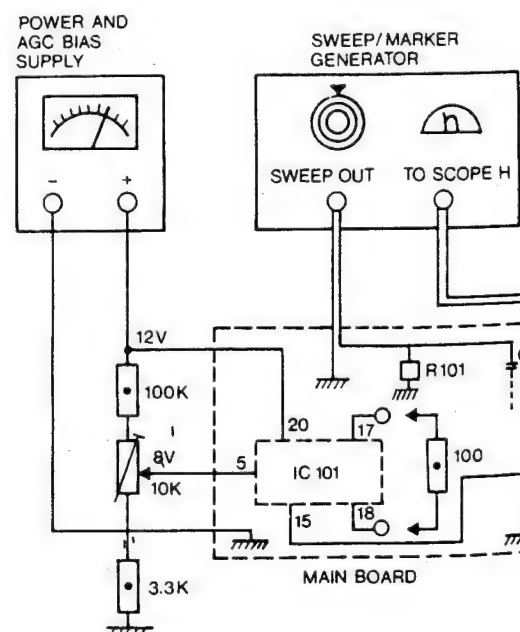


Fig.1 Picture I-F Sweep Alignment

until a good white balance at the least bright  
 il good white balance is obtained on both the  
 ht columns.

## MENT

erator — capable of generating markers at

ered DC power supply capable of supplying 16  
 at least 250 mA of current.

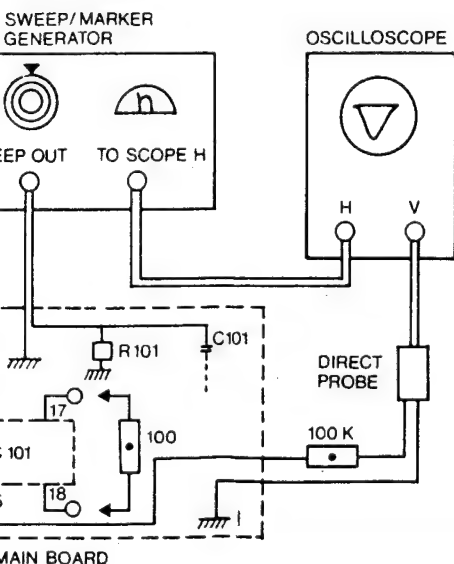
erator — capable of generating markers at  
 6MHz.

5 minutes should be allowed for proper  
 as sweep/marker generator and oscilloscope.

e sweep/marker generator can cause overloading  
 rmine that this condition is not present and that  
 the sweep/marker generator output to zero and  
 sweep output should not change the  
 xcept in amplitude. If the response changes in  
 g at the top or dropping below the base line at  
 o output to restore the proper configuration.  
 run as high as possible to maintain a usable  
 alues specified, thus requiring a lower power  
 erator and less chance of overload. Insertion of  
 generator should not cause distortion of the

ore making any test equipment connections.

tuner.  
 IC101 and bias pin 5 of IC101 to 8V as shown in



Alignment

3. Connect video IF sweep/marker generator output to junction of R101 and C101.
4. Connect oscilloscope direct probe to IC101 pin 15 through a 100K ohm resistor.
5. Adjust T127 for maximum gain at 39.5MHz
6. Connect a 100 ohm resistor across IC101 pins 17 and 18.
7. Adjust T114 for maximum gain at 39.5MHz.

### AFT ALIGNMENT

1. Remove IF link cable from tuner.
2. Supply 12V DC to pin 20 of IC101 and bias pin 5 of IC101 to 8V as shown in figure 2.

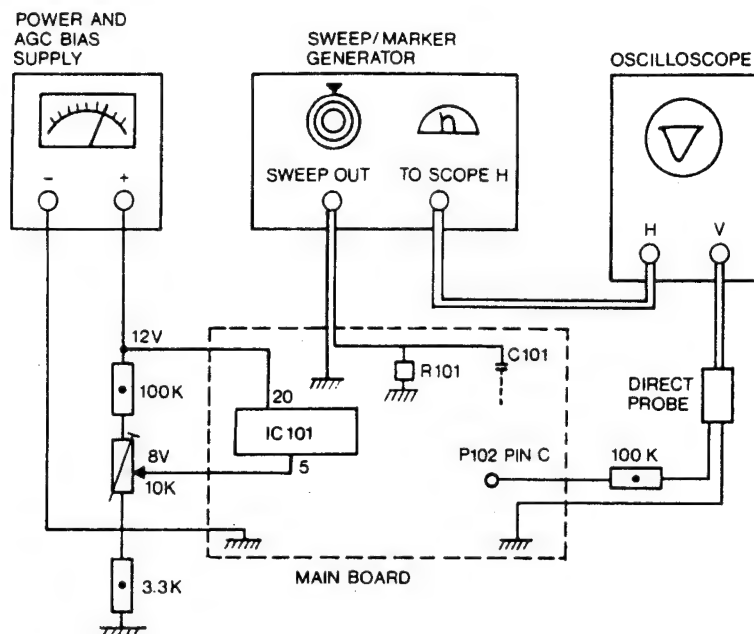


Fig.2 AFT Alignment

3. Connect video IF sweep/marker generator output to junction of R101 and C101.
4. Slide AFT switch to on position.
5. Connect oscilloscope direct probe to pin D of connector P102.
6. Adjust T131 for response shown in figure 3.

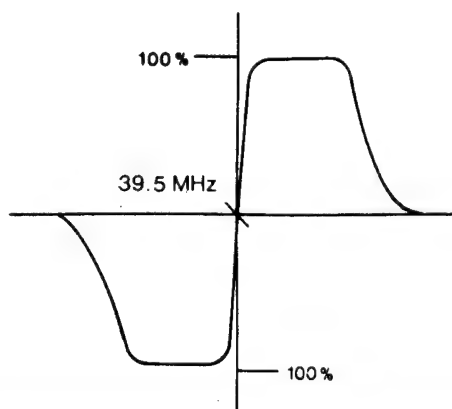


Fig.3 AFC Responses

### SIF DETECTOR

1. Remove IF link c
2. Supply 12V DC
3. Connect a 1K o
4. Connect sound capacitor as shc

### POWER AND AGC BIAS SUPPLY

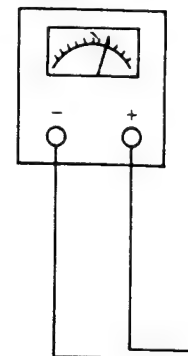


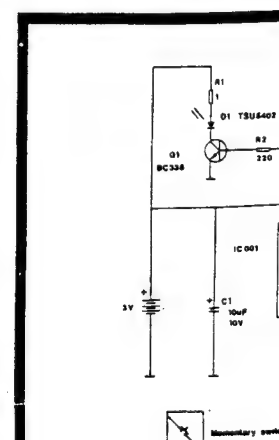
Fig.4 Sound De

5. Connect oscillos
6. Adjust T104 for i

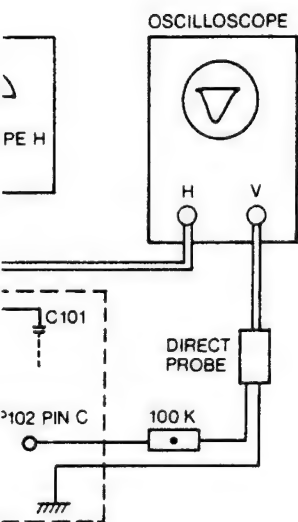


Fig.5 Sound De

### IR TRANSMITTER



in 5 of IC101 to 8V as shown in

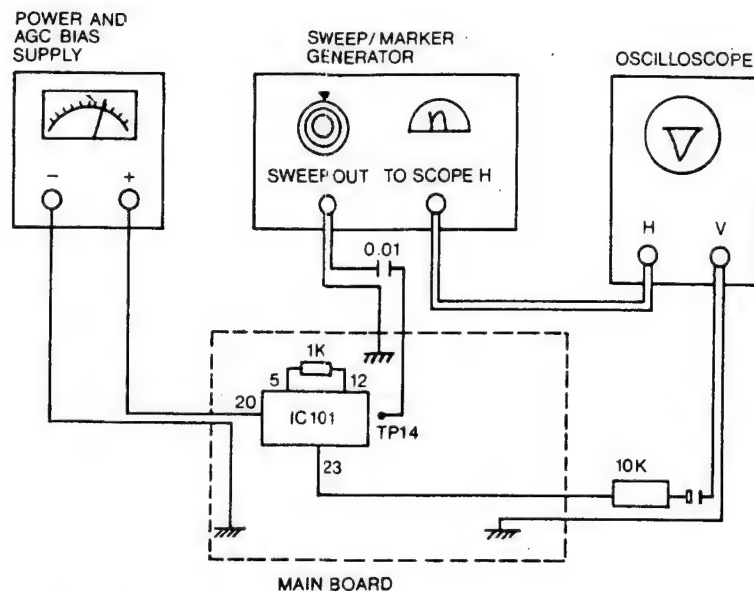


of connector P102.

## SIF DETECTOR COIL ALIGNMENT

1. Remove IF link cable from tuner.
2. Supply 12V DC to pin 20 of IC101.
3. Connect a 1K ohm resistor across pin 5 and 12 of IC101.
4. Connect sound IF sweep/marker generator output to TP14 through a 0.01u capacitor as shown in figure 4.

## SELE



**Fig.4 Sound Detector Alignment**

5. Connect oscilloscope probe to IC101 pin 23 through a 10K ohm resistor and a 1uF capacitor.
6. Adjust T104 for response shown in figure 5.

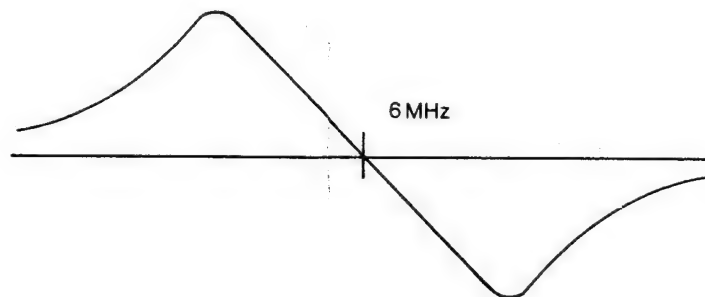
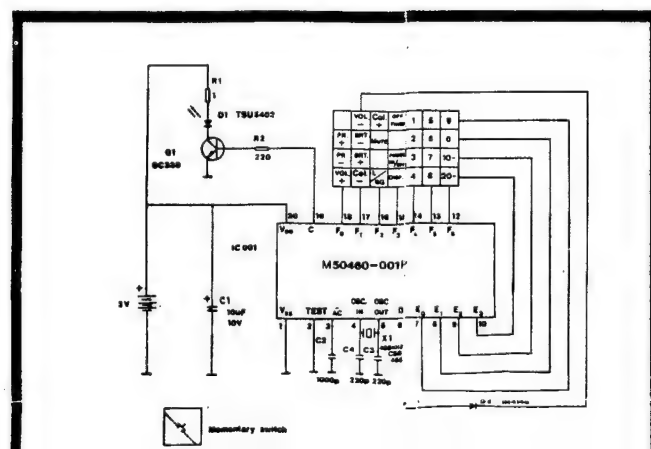
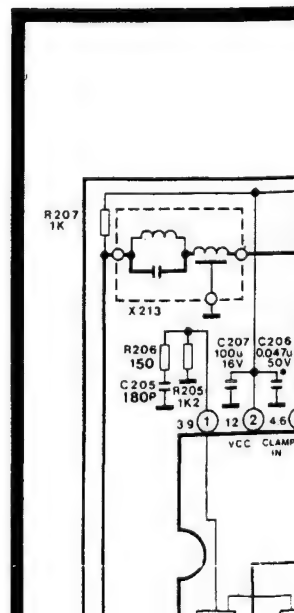


Fig.5 Sound Detector Response Curve

## IR TRANSMITTER



W.651  
16 OHM

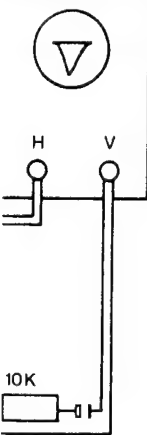




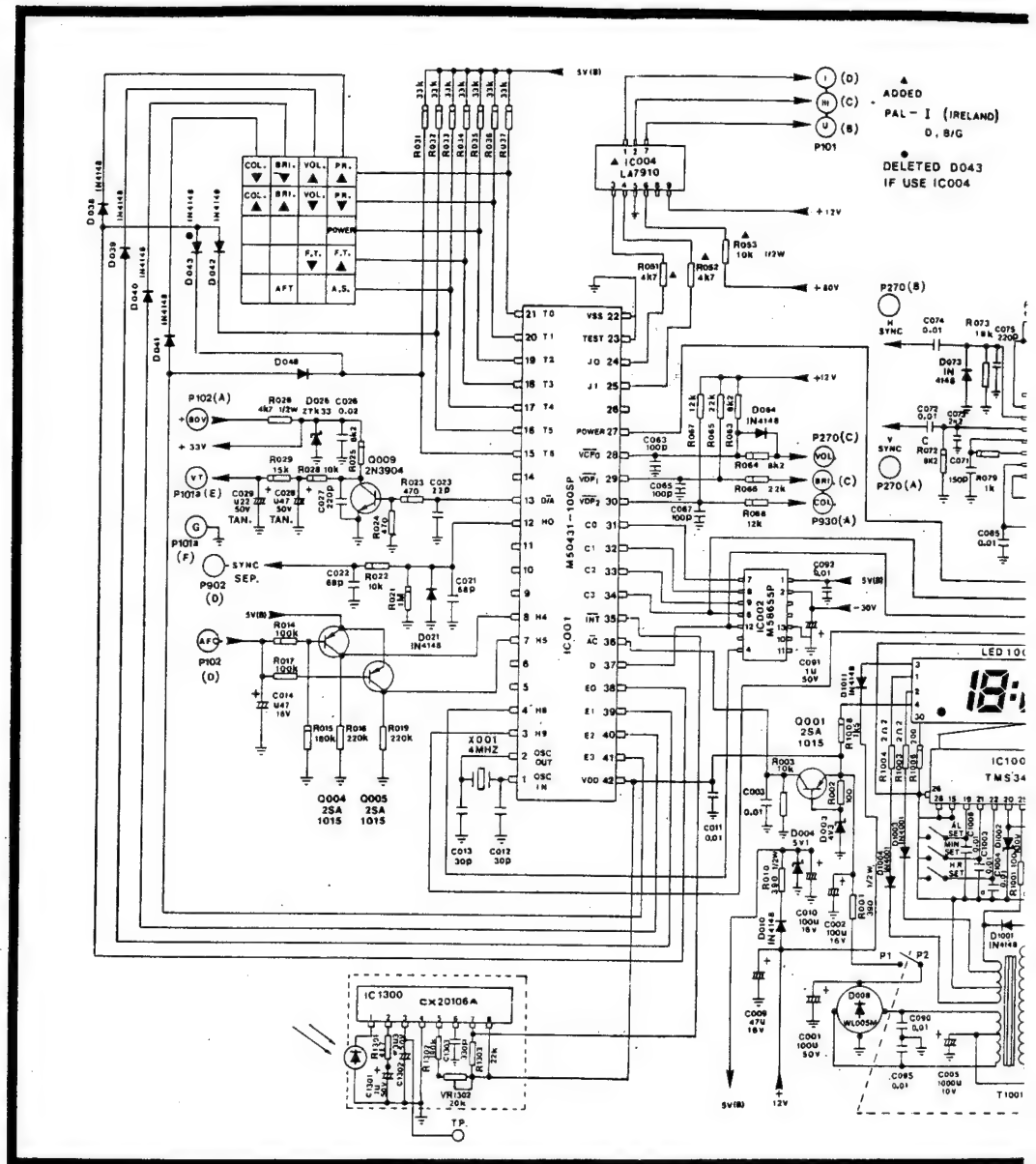
## SELECTOR BOARD

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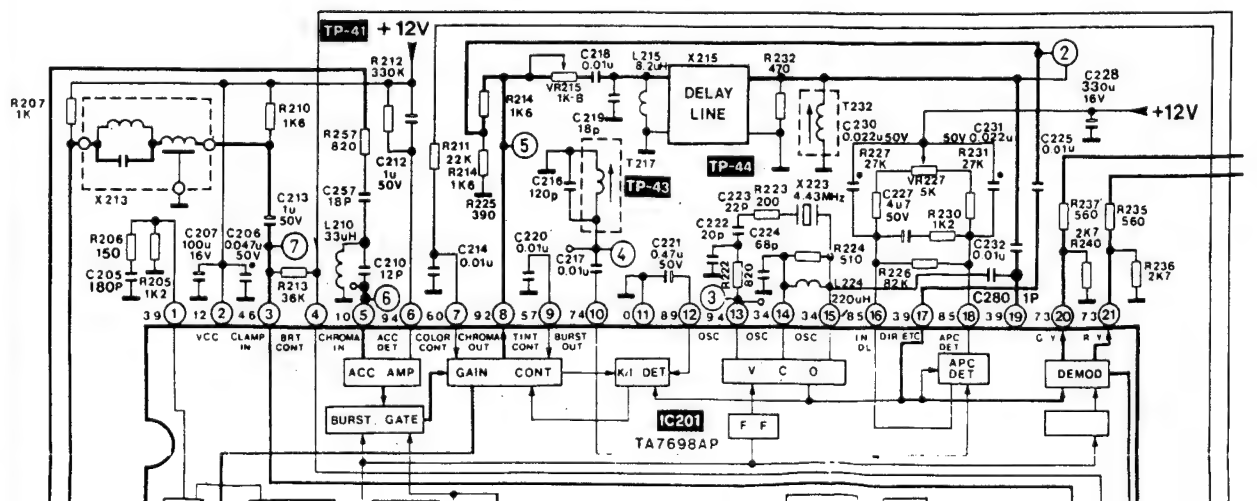
OSCILLOSCOPE



m resistor and



## 2 CHROMA DECODER



W661  
16 OHM



## SAFETY INSTRUCTIONS

**WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION," "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" DESCRIBED BELOW.**

### X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is 24.5 kv at zero beam current minimum brightness under 220/240 volts AC power source. The high voltage must not, under any circumstances, exceed 26.5 kv. B+ voltage closely relates to the high voltage. To prevent hazardous X-RAY RADIATION, the B+ voltage must be not exceed +124 volts.
2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some parts in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

### SAFETY PRECAUTION

1. Potentials as high as 23,000 volts are present when this receiver is operating. Operation of the receiver outside the cabinet or with the back board removed involves a shock hazard from the receiver.
  - 1 Servicing should not be attempted by anyone who is not thoroughly familiar with the precautions necessary when working on high-voltage equipment.
  - 2 Always discharge the picture tube anode to the receiver chassis to keep off the shock hazard before removing the anode cap.
  - 3 Perfectly discharge the high potential of the picture tube before handling the tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled.
2. If any Fuse in this TV receiver is blown, replace it with the FUSE specified in the chassis parts list.
3. When replacing parts or circuit boards, wind the lead wires around terminals before soldering.
4. When replacing a high wattage resistor (oxide metal film resistor) in circuit board, keep the resistor 10mm away from circuit board.
5. Keep wires away from high voltage or high temperature components.
6. This receiver can be operated under AC 220/240 volts, 50 Hz. NEVER connect to DC supply or any other power or frequency.
7. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 220/240 AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:  
Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 mfd, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 mfd capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts RMS. This corresponds to 0.2 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

Good earth  
such as a  
pipe, condu

### OBSERVATION OF VOLTAGES AND WAVEFORMS

1. Voltages read with VTVM from point shown to chassis ground, line voltage 220/240 volts, colour bar signal.
2. Voltages reading may vary  $\pm 20\%$ .
3. The schematic shown is representative only.
4. All waveforms are taken using a wide band oscilloscope and a low capacity probe.
5. Check FINE TUNING, AGC, BRIGHTNESS, CONTRAST and COLOUR controls for best picture, make sure that CONTRAST and COLOUR controls are in mid position and BRIGHTNESS control is almost in maximum position.
6. Waveforms are taken using a standard colour bar signal.

### NOTES:

1. D.C. resistance value of a principal schematic diagram. These are measured.
2. The circuits are subject to change.

### EXPRESSION

#### VALUE OF RESISTOR, CAPACITOR and

1. Resistance is shown in ohm, k = 1,000, M = 1,000,000.
2. Unless otherwise noted in schematic, values are expressed in mfd and the value is in  $\mu$ F.
3. Unless otherwise noted in schematic, values are expressed in uH, and the value is in  $\mu$ H.

This manual is the latest at the time of printing, and does not include the modifications by the constant improvement of product, which may be made after the printing.

## HINARI CONSUMER ELECTRONICS LTD

20-22 Payne Street, Port Dundas, Glasgow G4 0LF. Tel: 041-332 7795

Because we continually strive to improve our products, we may change specifications without prior notice.

CTIONS

UTION:" "SAFETY PRECAUTION"

X-RAY RADIATION in this TV re tube. For continued X-RAY ion, the replacement tube must e type tube as specified in the

ceiver have speical safety- cs for X-RAY RADIATION inued safety, parts replacement in only after referring to the NOTICE below.

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e. The picture tube is highly

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keep the resistor 10mm away

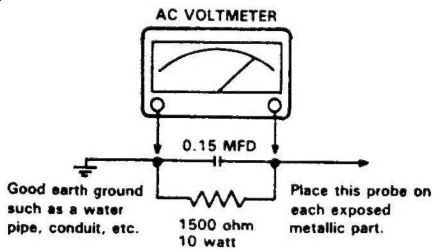
C supply or any other power or

eck on the exposed metallic rol shafts etc. to be sure the ctly into a 220/240 AC outlet (do 5000 ohms per volt or more

, between a known good earth asure the AC voltage across g at the AC outlet and repeat ot exceed 0.3 volts RMS. This ial shock hazard and must be

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the X-RAY RADIATION protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by shading on the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create X-RAY RADIATION.



NOTES:

1. D.C. resistance value of a principal transformer is shown in this schematic diagram. These are measured for separated from the circuit.
2. The circuits are subject to change without notice.

EXPRESSION

VALUE OF RESISTOR, CAPACITOR and INDUCTOR

1. Resistance is shown in ohm, k = 1,000, M = 1,000,000.
2. Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in mfd and the values more than 1 in pF.
3. Unless otherwise noted in schematic, all inductor values more than 1 are expressed in uH, and the values less than 1 in H.

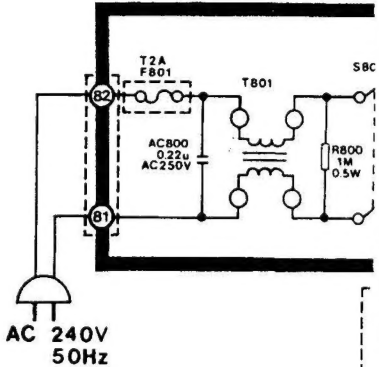
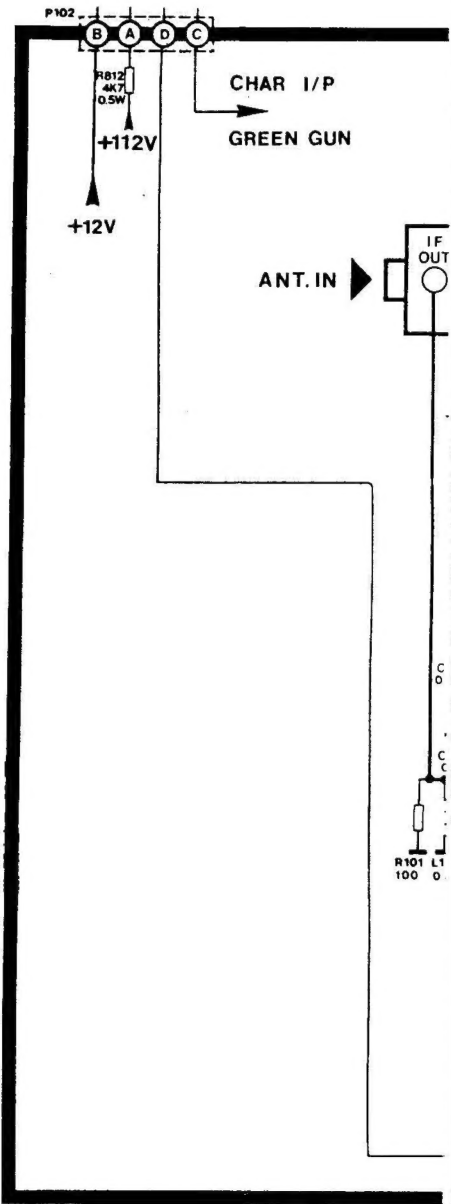
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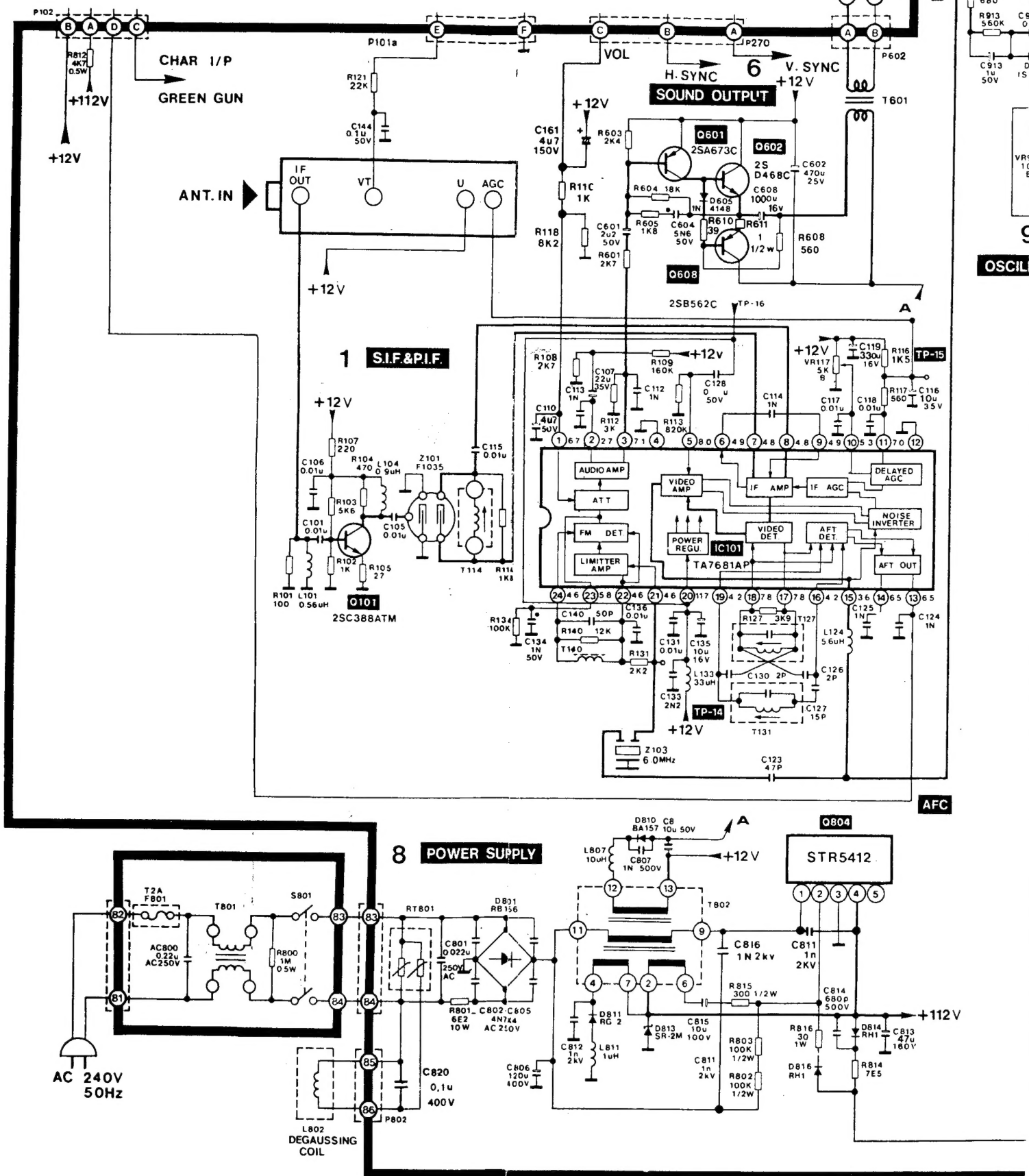
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may change specifications without prior notice.

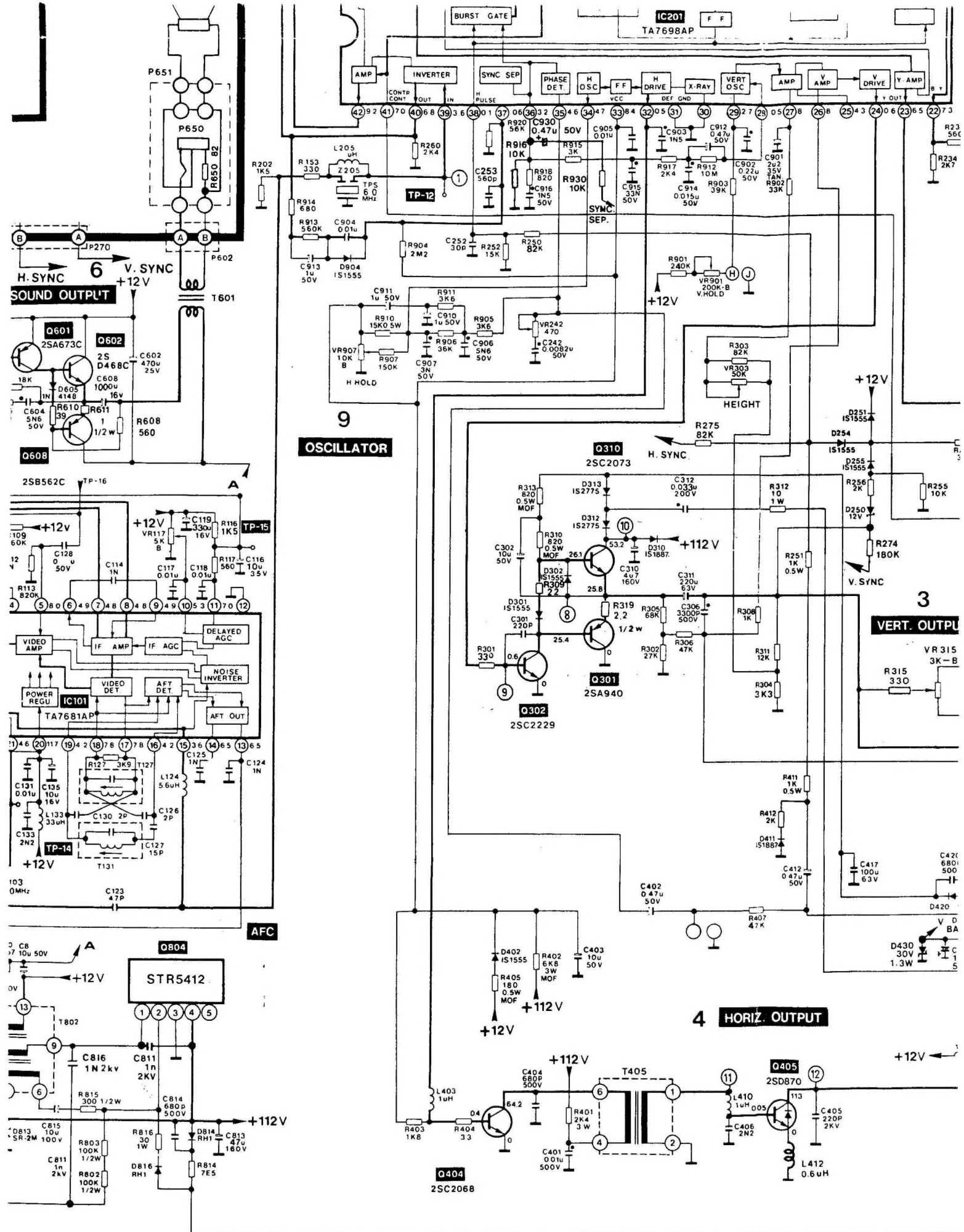
MAIN BOARD

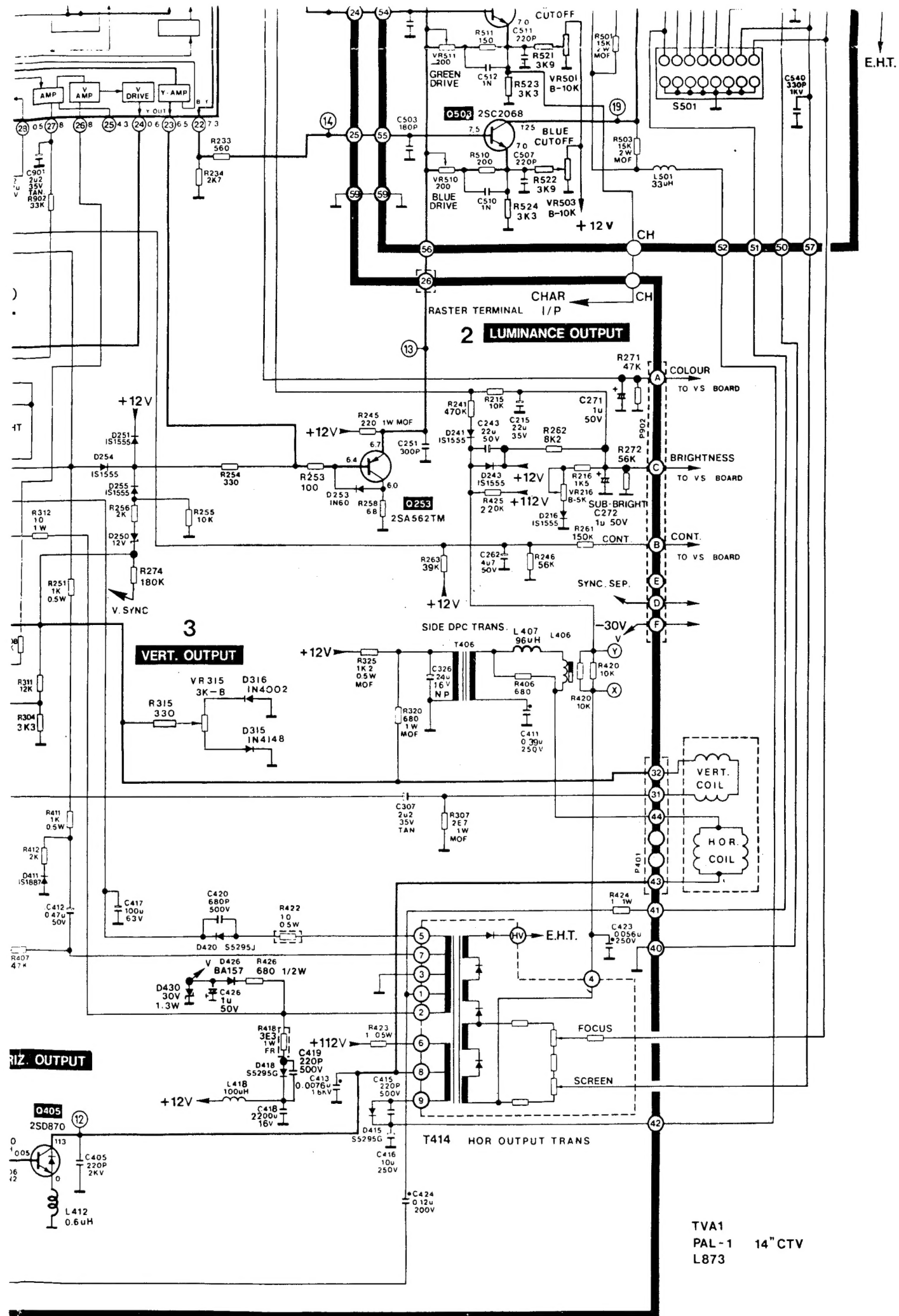


# MAIN BOARD









(SUBJECT TO CHANGE WITHOUT NOTICE)